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# THE EFFECTS OF AN IDEAL-L2-SELF-BASED INTERVENTION ON SECOND LANGUAGE MOTIVATION OF COLLEGE ENGLISH MAJORS IN CHINA

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THE EFFECTS OF AN IDEAL-L2-SELF-BASED INTERVENTION ON SECOND  
LANGUAGE MOTIVATION OF COLLEGE ENGLISH MAJORS IN CHINA

By

Yue Yang

A Dissertation Submitted to the

Graduate School

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Curriculum and Instruction

University of the Pacific  
Stockton, California

2019

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By

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THE EFFECTS OF AN IDEAL-L2-SELF-BASED INTERVENTION ON SECOND  
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By

Yue Yang

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# THE EFFECTS OF AN IDEAL-L2-SELF-BASED INTERVENTION ON SECOND LANGUAGE MOTIVATION OF COLLEGE ENGLISH MAJORS IN CHINA

Abstract

By Yue Yang

University of the Pacific  
2019

Motivation has been regarded as one key factor for successfully learning a second language (L2). This mixed-method study examined the effects of an Ideal-L2-Self-based intervention on second-year college English majors' L2 selves (the Ideal L2 Self and the Ought-to L2 Self), learners' perception of the L2 Learning Experience and the intended learning and motivation efforts needed in L2 learning in China.

The 4-week intervention consisted of 8 whole-class sessions and 2 one-on-one counseling meetings with the instructor. The quasi-experiment included 50 second-year English majors with equal numbers serving in the treatment and control groups. Pretest and posttest data were collected using a L2 Motivation Questionnaire. One-way ANCOVAs were used to address the quantitative research questions. The posttest served as the dependent variable and the pretest served as the covariate, along with group (treatment versus control) as the fixed factor. Content analysis was employed using documents written by all students in the treatment group during the intervention and transcripts of individual interviews conducted with five of these students.

The results of the study showed that the Ideal L2 Self of the students who attended the intervention was significantly strengthened after the intervention by demonstrating extended dimensions, more vivid vision and strengthened confidence in forming the vision. The students' Ought-to L2 Self was weakened with moderate effect size, by better vision of language learning

and more focus on learning aims. The students' L2 Learning Experience was greatly improved by stronger vision of English use. The students' Intended L2 Learning Efforts were significantly increased by forming clearer learning aims, turning passive learning to active learning, and having detailed action plans and reflections. The strengthened Ideal L2 Self was effective to weaken the Ought-to L2 Self, and thus decrease the pressure from others' opinions on students' language learning. The strong Ideal L2 Self helped to decrease the negative impact of L2 Learning Experience and improve the students' perception of existing learning experience. Finally, it helped students be more willing to learn English and put more efforts in the learning process.

Thus, this study suggests that the Ideal-L2-Self intervention can be an effective way of promoting the L2 motivation of English majors whose characteristics and context are similar to those participating in this study. In language teaching, it is important for teachers to strengthen learners' Ideal L2 Self by improving their confidence and encourage students to focus on their own learning process by providing them with various supportive motivational strategies, such as detailed analysis of learning aims, obstacles and a realistic action plan with meaningful reflections.

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## LIST OF ABBREVIATIONS

EFL	English as foreign language
L2	second language
L2MSS	L2 Motivational Self System
STD	Self-determination theory

## LIST OF SYMBOLS

$\alpha$  Cronbach's alpha

$\eta_p^2$  Partial eta squared

## CHAPTER 1: INTRODUCTION

### **Background of the Study**

The foreign language policy in China has experienced tremendous changes after implementation of the open-door policy in 1978 and the continuous development of modernization and internationalization, which lead to the rapid expansion of English teaching and learning (Pan & Block, 2011). Zhong (2015) reports that by 2014, more than 1000 colleges and universities nationwide have established English language as a major and the population of enrolled English-major undergraduates reached 600,000.

However, the national survey conducted by Fan and Chen in 2009 shows that only 46.66% undergraduates are satisfied with their major, which means that more than half of the undergraduates are unsatisfied with the major despite being expected to apply it for years within their future careers. Many undergraduates take English as their major not because they have interest or passion in learning the language, but because of their results on the College Entrance Examination, parents' willingness, or high school teachers' advice (Fan & Chen, 2009). Furthermore, many undergraduates lack motivation not only in choosing English as their major, but in learning it all through the four-year study in college, which influences the development of their future careers. The stagnant situation is further reflected in the low pass rate (lower than 50% nationally) of National Test for English Majors-Band 4 and 8 which are the two compulsory and most authentic English proficiency test for English majors in China (Sun, Hu, & Bu, 2017).

The effectiveness of instruction depends greatly on learners' motivation that is essential for language learning (Arnold, Puchta, & Rinvoluceri, 2007). Language teachers, rather than try to make the course easier or more fun, "should concentrate on helping students to re-focus their



goals or their expectations of language learning” (Macaro, 2003, p. 107). When learners are aware of their motivation process in an explicit way to notice their source and specific tasks, they are more likely to achieve greater autonomy in their own learning (Gregersen & MacIntyre, 2014).

Motivation has been regarded by both teachers and researchers as one key factor be successful in second language (L2) learning (Harmer, 2007). It determines language learners’ willingness to participate in the learning process and determination to overcome any difficulties (Oxford & Shearin, 1994). Furthermore, L2 motivation compensates considerable deficiencies in language aptitude and learning conditions (Dörnyei, 1998). If the English-major undergraduates could develop their own effective L2 motivational strategies, it will activate and promote their L2 motivation.

The research of L2 motivation has boomed during the past decade, far exceeding the studies concerning language learners’ other characteristics (Boo, Dörnyei, & Ryan, 2015). There are about 416 articles focusing on L2 motivation either published as journal articles or as chapters in motivation related books during 2005 to 2014 (Boo et al., 2015), with the focus switching from social-psychological model proposed by Gardner and Lambert to L2 Motivational Self System (L2MSS) proposed by Dörnyei (Mackay, 2019).

Based on the findings of a longitudinal survey study of Hungarian students’ language learning motivation, Dörnyei (2005) borrowed ideas from the psychological theory of possible self (Markus & Nurius, 1986) to develop the newest perspective of L2 motivation research—L2MSS, concentrating on an individual’s vision of future self which serves as the self-guide to motivate learners to become that future self and sustain the efforts during the course (Ushioda & Dörnyei, 2009).

As a theoretical framework to explore learners' motivation by emphasizing on learners' possible selves in a globalized language learning context, a growing number of studies have been conducted to validate the L2MSS in various language learning contexts in recent years, especially in English as foreign language (EFL) countries, including China, Japan, Hungary, Iran (Csiz   & Kormos, 2009; Ryan, 2009; Taguchi, Magid & Papi, 2009; You & D rnyei, 2016). The research studies show that L2MSS may better explain learners' L2 motivation and the more important thing is that the framework provides a novel way for motivating language learners by transferring the motivational theory into classroom practice (D rnyei, 2009). Classroom interventions based on the L2MSS framework have also been designed for different groups of L2 learners and have been proved to be effective in improving learners' motivation to learn English. Furthermore, the interventions help L2 learners to put more efforts in English learning process (Chan, 2014; Magid, 2014; Mackay, 2019). The theoretical framework part will explain the L2 Motivational Self System in details.

### **Theoretical Framework**

The L2 Motivational Self System is made up of three key components: Ideal L2 Self, Ought-to L2 Self and L2 Learning Experience. Ideal L2 Self is defined as "the L2-specific facet of one's ideal self" (D rnyei, 2009, p. 29). It represents the learners' self-relevant image of what they want to become using L2 in the future. Ideal L2 Self involves vivid images and senses. It is more concerned of learners' experience when they are engaged in motivated activities. The term of Ideal L2 Self is broader than future goals since it also includes learners' expectancies, beliefs and values. The Ideal L2 Self is a powerful motivator for L2 learning because it creates discrepancy between learners' actual self and ideal self (D rnyei, 2009). In order to become

one's Ideal L2 Self, L2 learners will try to reduce the discrepancy and put continuous efforts in L2 learning. This kind of motivation is more internalized for learners.

The second component is Ought-to L2 Self which is the learners' vision of what they should become in order to satisfy the expectations of the family or the society and to avoid possible negative outcomes. Learners might want to learn English well because their parents want them to become fluent English speakers or they learn English well because they do not want to be laughed at by the peer groups. This Ought-to L2 Self is a less internalized motivation (Dörnyei, 2009).

The third component is L2 Learning Experience which concerns the learners' actual learning environment and experience, such as the impact of curriculum, peer groups, and teachers (Dörnyei, 2009).

Among the three components, the Ideal L2 Self is regarded as the most powerful driving force to strengthen learners' L2 motivation by creating language learning vision and through imagery enhancement. Since Ideal L2 Self is an internalized motive, once the learners understand the way to activate and improve their Ideal L2 Self, it may help them to improve their intended learning efforts which is the sustainable efforts used in language learning process (Dörnyei, 2009). The Ought-to L2 Self and the L2 Learning Experience are more of externalized motives, so it is more difficult for learners to control the related factors to improve the motivation. However, the change of the Ideal L2 Self might affect learners' understanding of Ought-to L2 Self and their perception of L2 Learning experience. So, the motivational strategies used in the intervention will focus on promoting the Ideal L2 Self.

Dörnyei (2009) suggested that the key step in a motivational intervention is to help learners be aware of their Ideal L2 Self and then strengthen it, which is to create their own vision

of the future self. Individuals with clear and vivid vision are more likely to have long-term commitment and efforts to learn L2 (Dörnyei, Henry & Muir, 2016). However, the capacity for clear and vivid vision is not born with and needs purposeful training and practice (Diekhof, Kipshagen, Falkai, Dechent, & Baudewig, 2011). The effects of vision training have been widely investigated in sport psychology field, with the results revealing the moderate improvement of motivation and performance (Gregg & Hall, 2006). In recent years, vision training has also been used in classroom intervention programs to investigate L2 learners' motivation and learning efforts, which shows positive results (Mackay, 2019). Therefore, it is meaningful to adopt possible self strategies in the intervention to examine the effects on the change of learners' motivation.

### **Purpose of the Study**

The purpose of this mixed-method study was to examine the effects of the Ideal-L2-Self-based intervention on college English majors' L2 selves (the Ideal L2 Self and the Ought-to L2 Self), learners' perception of the L2 Learning Experience and the intended learning efforts needed in L2 learning for college English majors in China.

### **Research Questions**

Research Question One (RQ1): Will the students' Ideal L2 Self be strengthened as a result of the Ideal-L2-Self-based intervention?

Research Question Two (RQ2): Will the students' Ought-to L2 Self be weakened as a result of the Ideal-L2-Self-based intervention?

Research Question Three (RQ3): Will the students' perception of their L2 Learning Experience be improved as a result of the Ideal-L2-Self-based intervention?

Research Question Four (RQ 4): How does students' Intended L2 Learning Efforts change as a result of the Ideal-L2-Self-based intervention?

### **Significance of the Study**

This study is significant for four reasons. First, the study deals with the current issue of lacking motivation among English-major undergraduates through the four-year study in college. By providing students with Ideal-L2-Self-based intervention, this study provides evidence for the positive effects of the intervention in English majors' L2 motivation and learning efforts with the significant improvement of learners' Ideal L2 Self. Next, the study extends the understanding of the practical application of L2 Motivational Self System by investigating the effects of Ideal-L2-Self-based intervention on the three components (Ideal L2 Self, Ought-to L2 Self, and L2 Learning Experience) of the system and intended L2 learning efforts by collecting and analyzing both survey, written Ideal L2 Self and interview data. Third, the study will support teachers with some effective motivational strategies in L2 teaching to improve the students' L2 motivation and learning efforts. Finally, this study further extends previous research conducted in other countries that similar interventions are also effective in promoting students' language learning motivation in Chinese L2 context.

### **Summary and Preview of the Dissertation**

In this chapter, background of the Ideal-L2-Self-based intervention is addressed to highlight the importance of improving students' L2 learning motivation. Then, the L2MSS is explained as a theoretical framework for this study to guide the intervention. Finally, purpose of the study and research questions are identified to guide the study, along with significance of the study.

Chapter two is review of the literature, explaining the L2MSS theoretically and the related validation studies to demonstrate the necessity to study the effects of the Ideal-L2-Self-based intervention on the three components of the L2MSS and learners' L2 learning efforts. The practical potential of the L2MSS is explored as the second section in chapter two to provide the theoretical and practical basis for the design of the Ideal-L2-Self-based intervention. The last part of the chapter is to review the Ideal-L2-Self-based interventions conducted by previous researchers which suggest hypotheses of the change of Ideal L2 Self, Ought-to L2 Self, L2 Learning Experience and Intended L2 Learning Efforts for this study.

Chapter three is methodology adopted in this study. The mixed-method research design is justified first and participants are introduced. Then the instruments used in the study are described and rationalized. Data collection and data analysis, including both quantitative and qualitative parts are explained.

The results of the study are presented separately as quantitative results and qualitative findings regarding each research question in chapter four. Then the summary of the study is presented in chapter five, along with themes emerged from the study and implications, limitations and recommendations for further research.

### **Definition of Terms**

*Intervention:* Motivational strategies based on the Ideal L2 Self that are instructed in classroom to help students improve L2 motivation.

*The L2 Motivational Self System (L2MSS):* the L2MSS is proposed by Dörnyei in 2005 and it is composed of three components: Ideal L2 Self, Ought-to L2 Self and the L2 Learning Experience. The L2MSS has been validated by investigating large samples to better explain the learners' L2 motivation in various countries, especially in the EFL (English as Foreign Language)

contexts. It offers more practical ways to improve the learners' L2 motivation and their intended learning efforts in the classroom setting by strengthening (Dörnyei, 2005).

*Vision:* It is a vivid mental image which is mainly formed and developed in the process of personal development. In motivational context, vision offers “a useful, broad lens to focus on the bigger picture, the overall persistence that is necessary to lead one to ultimate language attainment” (Dörnyei & Kubanyiova, 2014, p. 4).

## CHATER 2: REVIEW OF THE LITERATURE

### **Overview of Literature Review**

There are four parts in the chapter of literature review. The first part is an introduction, exploring the definition of general motivation, L2 motivation and providing a very brief development of the L2 motivation theories. The second part is the detailed explanation of the L2 Motivation Self System, including its main components, the relations of the components and influential studies validating the L2MSS theoretical framework to rationalize my research questions. The third part is the practical potential of the L2MSS which explain the practical source the L2MSS and necessary stages for maximizing the motivating capacity of the L2MSS. This part significantly informs the design of the Ideal-L2-Self intervention in this study. The last part is the review of some important Ideal L2 Self interventions designed and conducted in recent years which may indicate the assumptions of the intervention in this study.

### **Introduction**

Motivation essentially is some kind of drive that pushes individuals to think and behave as they do in order to achieve something (Harmer, 2007). It refers to people's decision about doing a particular action, the efforts they are willing to put into it, and their persistence with it (Dörnyei & Skehan, 2003). Motivation contributes particular importance in mastering a second language because it provides “the primary impetus to initiate L2 learning and, later on, the driving force to sustain the lengthy and often tedious learning process” (Dörnyei, 2018, p. 4293).

L2 motivation was first systematically researched by Lambert and Gardner in 1959 from a social psychological perspective, which had dominated the research area until 1990s. They divided L2 motivation mainly into two categories—integrative motivation referred to “the



individual's willingness and interest in having social interaction with members of the L2 group" (Masgoret & Gardner, 2003, p. 126) and instrumental motivation defined as "aspirations of the potential pragmatic gains of L2 proficiency, such as getting a better job or a higher salary" (Dörnyei, 2001, p. 49). The impact of this theoretical framework was so profound that it dominated L2 motivational research field for more than three decades. Until 1990s, some researchers began to realize the limitation of social psychological approach (Crooks & Schmidt, 1991). The suitable context for this framework was in the bilingual community in Canada where Gardner and Lambert first proposed it. However, it is hard to adopt this framework to explain L2 learners' motivation in English as foreign language (EFL) contexts. Researchers began to further the understanding of L2 motivation by introducing cognitive theories in line with mainstream motivational psychology, such as the self-determination theory (SDT) that categorized motivation into intrinsic one (motivation comes from within the individual) and extrinsic one (the result of outside factors) (e.g., Deci & Ryan, 1985, 2002; Ushioda, 1996, 2001). At the beginning of the 21<sup>st</sup> century, L2 motivation research was characterized by the emphasis on its dynamic and fluctuating nature before and during the engagement in L2 learning (e.g., Dörnyei, 2001; Ushioda, 2001; Williams & Burden, 1999).

### **The L2 Motivational Self System**

Based on previous L2 motivation theories, Dörnyei proposed a new theoretical framework as the L2 Motivational Self System in 2005, which reframed and integrated some main components of the previous influential L2 motivational frameworks. The L2 Motivational Self System shifts the emphasis from specific learning context (e.g., Gardner's social-psychological theory focusing on the L2 learners in bilingual contexts in Canada) to learners' inner world, which gives prominence to improve learners' active and constructive role in

language learning. Furthermore, the L2MSS framework provides innovative ways to improve learners' motivation in a classroom setting by concerning the promotion of the Ideal L2 Self through constructing language learning vision and imagery enhancement (Dörnyei, 2009). This theoretical framework is regarded to be the most suitable one to analyze L2 motivation in the global EFL contexts (Csizér & Kormos, 2009).

### **The Construct of the L2MSS**

The construct of the L2MSS contains three main components:

Ideal L2 Self, which is the L2-specific facet of one's ideal self. For example, it could be the person we would like to become associated with certain lifestyles or professions. It is a more intrinsic motivation for language learners (Dörnyei, 2009).

Ought-to L2 Self, which regards the L2 self that one believes one should possess in order to meet the expectations from others and to avoid negative outcomes of learning. It is a more extrinsic motivation for language learners ((Dörnyei, 2014).

L2 Learning Experience, which concerns the learning environments and experiences related learners' L2 learning, for instances, the impact of the teachers, quality of a language course, the learning materials or the peer group (Dörnyei, 2009).

Thus, there are three sources of the motivation to learn a L2 which are learners' internal drive to become an ideal L2 user in various contexts, pressures from outside environment to drive the learners to master a L2 and the experience being engaged in the learning process (e.g. positive impact of success in test or the positive feedback from the teacher) (Dörnyei & Chan, 2013). Among the three sources, the Ideal L2 Self is the more internalized facet of motivation which is regarded as a more powerful motivator to L2 learning (Dörnyei, 2009), while the Ought-to L2 Self is the more externalized facet of motivation. Both of the two components

represent the learners' self-concept. Most researchers believe that intrinsic motivation produces better results of language learning than extrinsic motivation (Harmer, 2007). However, intrinsic and extrinsic motivations are not settled as two counterparts of the motivation. In certain situations, the extrinsic motivation may experience an internalization process to become intrinsic one (Noel, Pelletier, Clément, & Vallerand, 2000). The L2 Learning Experience is concerned with the external factors that are controlled by others, rather than learners, but it still exerts great influence on learners' motivation through the learners' perception of it. Based on the analysis above, it is worthwhile to study the impact of an Ideal-L2-Self-based intervention on all three components of the L2MSS because of the potential effects on students' motivation, and thus efforts towards achievement.

### **Validation of the L2MSS**

Since the L2 Motivational Self System was proposed by Dörnyei (2005), several quantitative studies have been conducted to validate the theory in analyzing L2 learners' motivation in various language learning context, mainly including Hungary, Japan, China, Iran and Indonesia (e.g., Csizér & Kormos, 2009; Lamb, 2012; Papi & Teimouri, 2012; Ryan, 2009; Taguchi, Magid, & Papi, 2009). The findings consistently confirmed the strong power of the L2MSS to explain learners' motivation, with the Ideal L2 Self as a strong predictor of learners' efforts in language learning.

As the first large scale validation study of the L2MSS, Taguchi, Magid and Papi (2009) conducted a large-scale survey study in three important Asian contexts, including Japan, China and Iran. The total number of the participants in their study was nearly 5000, ranging from 11 to 53 years old and covering middle school students, English majors and non-English majors in universities and work professionals. They used three versions of a questionnaire adapted to

Japan, China and Iran respectively. There were ten factors in the questionnaire: criterion measures (intended learning efforts), Ideal L2 Self, Ought-to L2 Self, family influence, instrumentality-promotion, instrumentality-prevention, attitudes to learning English, cultural interest, attitudes to L2 community and integrativeness. Those factors were used to do correlational analysis between the construct of the L2MSS and the motivational variables of the previous theoretical frameworks.

Their study found that the L2 Motivational Self System could better explain the learners' L2 motivation with its three components as the Ideal L2 Self, Ought-to L2 Self and the L2 Learning Experience than Gardner's social-psychological framework. The study also informed some cultural differences in various learning contexts based on the analysis of the three components.

As to the Ideal L2 Self, the researchers found that the personal agreeableness and professional success had equally important contribution to the formation of the Ideal L2 Self of the Chinese and Iranian participants. They also had a more prominent Ideal L2 Self and higher average on learning efforts than the Japanese participants. Furthermore, among the three components, the Ideal L2 Self had the highest correlation with the learning efforts than the other two components in China. The findings supported the possibilities of using the Ideal-L2-Self-based intervention to influence the Chinese learners' learning efforts and both learners' personal agreeableness and professional success should be included in designing the supporting materials for learners' formation of their Ideal L2 Self in the intervention.

The Ought-to L2 Self of the Chinese participants showed interesting pattern, which was found to be heavily influenced by their family as a promotional factor of the motivation. The coefficient between family influence and Ought-to L2 Self for Chinese learners reached 0.64

( $p < 0.001$ ). The explanation of the researchers was that young people in China tended to have a heavy burden to support their family financially and emotionally. They would be more likely to fulfill the parents' wishes than the Westerners. In China, parents often choose a major for their children who may have no idea of what they are really interested in. The researchers in this study suggested that the analysis of the Ought-to L2 Self should be combined with family influence, since "the Ought-to L2 Self contains not only aspects related to friends and colleagues, but also to family" (Taguchi et al., p. 78). So, it would be prudent to combine the family influence as a factor in learners' Ought-to L2 Self together with friends and social norms in the questionnaire to study learners' Ought-to L2 Self.

The L2 Learning Experience, which was measured by attitudes to learning English in this study, was found to be less important for the Chinese participants' motivation than the Japanese and Iranian participants' motivation. The researchers explained that because of the heavy pressure from achieving the future desired selves, Chinese students pay less attention to their classroom experience, which lacked support from other studies. It would be worthwhile to explore the effects of intervention on students' L2 Learning Experience in this study.

Csizér and Kormos's (2009) study presented similar L2 motivational patterns to Taguchi et al.'s research. Their study surveyed 432 participants, with 202 secondary school students and 230 university students in Hungary. The results revealed that for both groups, the Ideal L2 Self was a more powerful predictor of students' learning efforts than the Ought-to L2 Self, since it embodied intrinsic interest and a strong self-concept. The external incentives of the Ought-to L2 Self played a limited role in affecting learners' learning efforts, and parental encouragement exerted a prominent influence on the Ought-to L2 Self.

L2 learning experience in this study played the role as important as the Ideal L2 Self in influencing learners' intended learning efforts at the university level. This finding helps to rationalize that it was necessary to study the effects of the Ideal-L2-Self-based intervention on learners' perception of their L2 Learning Experience since the improvement of the Ideal L2 Self might offset the disadvantage of the existing learning experience and help learners to develop the more intrinsic motivation. Csizér and Kormos also found that in the relation to learning efforts, the importance of the Ideal L2 Self increased while the L2 learning experience decreased as the age of participants increased, which indicated that university students might have a more developed L2 Self that would compensate even for the negative learning experience.

Ryan's (2009) study added more evidence to the validation of the L2 Motivational Self System by surveying 2397 learners of English at middle schools and tertiary level (English majors and non-English majors) in Japan. The finding revealed that Ideal L2 Self was a better means of explaining motivated language learning behavior, which was consistent with the previous studies. He specifically pointed out in the result that the Ideal L2 Self obviously was a stronger indicator of intended learning effort for the university English majors. The additional highlight in Ryan's study was that there were no gender differences concerning the concept of the Ideal L2 Self. Based on the results of Ryan's study, it was expected that there would be no gender differences in China either.

You and Dörnyei (2016) conducted a large-scale (over 10,000 students) cross-sectional survey study targeting at English language learners in secondary schools and universities in China. The samples stratified according to geographical region, teaching contexts (secondary schools, key universities, and ordinary universities), urban and rural locations. There were nine motivational variables included in the study: Ideal L2 Self, instrumentality-promotion, cultural

interest, travelling, Ought-to L2 Self, instrumentality-prevention, parental expectations, Language learning experience (attitudes to L2 learning) and intended effort. The researchers made comparisons across genders, geographical regions, teaching contexts and found that for Chinese college English majors, they showed little differences concerning gender and geographical regions. As to the teaching contexts, the more advanced and specialized English education one had, the stronger ideal language image he/she entertained. The English majors enjoyed their ideal L2 self most, which supported the possibility to do ideal-self-based intervention with college English majors.

One finding of their study was inconsistent from the previous study (Taguchi et al., 2009) referring to the variable of parental expectation. Parental expectation was found to achieve the lowest points of all scales, which went against a stereotype that Chinese learners experience more pressure from their parents. However, for college English majors, parental expectation achieved exceptionally high points. The researchers explained that it was because as a major, English was highly related to the learners' future career and personal development. So, the parents put closer attention on it and had high expectations (You & Dörnyei, 2016).

As to the correlation of the three components with the intended learning efforts, it showed similar pattern to Csizér and Kormos's (2009) study as the L2 learning experience exerted the most influence on intended learning efforts but with the increase of the age of the participants, the significance of the L2 learning experience decreased.

All the studies discussed above validated the L2 Motivational Self System in various language learning contexts and the results consistently supported the significant role the Ideal L2 Self played in language learning motivation and learning efforts. The change of the Ideal L2 Self may influence the change of the other two components (Ought-to L2 Self and the L2

Learning Experience) in the L2 Motivational Self System. Thus, it is worthwhile to study the effects of the Ideal-L2-Self-based intervention on the three components of the L2 Motivational Self System and learners' intended learning efforts.

### **Practical Potential of the L2 Motivational Self System**

#### **Theoretical Basis of the L2MSS**

The validation of the L2 Motivational Self System provides huge practical potential to be used in the classroom setting to motivate language learners. The practical potential is based on the study of possible selves in psychology (Dörnyei, 2005). Markus and Nurius (1986) defined possible selves as “it pertains to how individuals think about their potential and about their future” (p. 954), which could be the “ideal ones that people would like to become, the selves that people could become, and the selves that people are afraid of becoming” (p. 954). The concept is based on individuals' past experiences, aspirations and the social contexts around them. Markus and Nurius (1986) described that possible selves were the “cognitive bridges between the present and future, specifying how individuals may change from they are now to what they will become” (p. 961). These possible selves act as future self guides, harnessing the imagination to motivate behavior in the present. This means that in order to attain their ideal self, individuals realize the gap between the ideal self and the actual self and then make efforts to fulfill the gap (Higgins, 1987).

#### **Necessary Stages for the L2MSS**

Dörnyei (2009) borrowed the possible selves theory to the L2 motivation field and pointed out that the focus of the practical implementation should be on the Ideal L2 Self by producing a language learning vision and strengthening the imagery. He suggested certain conditions to make the Ideal L2 Self become an effective motivator: if the learner has a vivid and



elaborate desired future self-image which is plausible and does not contradict the expectations of the family, peers and other social norms; then that Ideal L2 Self is regularly activated and is supported by appropriate and effective strategies as a roadmap to the goal; finally the learner needs to fully realize the negative consequences if he/she does not achieve the goal.

Based on those conditions, Dörnyei further provided four stages applying to the practical implementation, which are the construction of the Ideal L2 Self by creating the vision and strengthening it; making the Ideal L2 Self plausible and active by substantiating the vision and keeping it alive; making the Ideal L2 Self operational by developing action plans and finally considering the failure as a counterbalancing factor. Those conditions are the basis for the design of the Ideal-L2-Self-based intervention in this study and the four stages of the strategies will serve as the basic guides to organize the intervention and select the materials used in it. The following discussion is an in-depth analysis on the research on possible selves to synthesize significant stages with which an intervention focusing on Ideal L2 Self could be developed.

**Constructing the Ideal L2 Self.** Dörnyei (2009) suggested that to some extent, the low L2 motivation might be caused by the lack of a clear and vivid ideal self. Many L2 learners do not have a clear view of how the L2 would influence their life, both professionally and privately in the future. Therefore, the first step in a motivational intervention is to help the learners construct the Ideal L2 Self, which means to create their vision and strengthen it. More accurately speaking, creating the vision means to help the learners be mindful of and construct their Ideal L2 Self purposefully from their past various dreams, aspirations and desires since it is impossible to create the ideal self from nothing. Some studies in other fields have proved that possible selves—representing the individual's idea of what they would like to become (ideal self), what they might become (expected self) and what they are afraid of becoming (feared self) (Markus &

Nurius, 1986) could be surfaced elaborately by adopting suitable strategies to help the learners improve motivation and even achievements (e.g., Oyserman, Terry, & Bybee, 2002, 2006; Hock, Deshler & Schumaker, 2006; Sheldon & Lyubomirsky, 2006).

Oyserman et al. (2002) conducted a possible selves intervention to enhance urban African American middle school students' school involvement by first helping them create an elaborate and concrete adult imagery by reviewing their past successes and failures in a positive atmosphere. For example, the students were encouraged to describe their adult images in various domains, such as work, family or community service, how they made the choices and then shared the images with others. The similar strategy was used by Oyserman et al. (2006) in another Possible Self intervention targeting at low-income middle school students in Detroit. The students were asked to introduce one of their classmates, focusing on what traits and abilities he/she possessed which could help him/her complete the school year successfully and then everyone picked one photograph fitting their adult possible selves. The strategies for creating vision in both studies were proved effective to help the students form their ideal self in the future, which made it successful for the students to move to the next few strategies concerning substantiating and operating their ideal self.

In another intervention program designed by Hock et al. (2006) to cultivate academic and personal motivation of demotivated students in elementary through post-secondary schools, the researchers developed six components in the program and the first three components targeting at constructing the students' hoped-for selves by discovering their strengths and interests, defining their hopes, expectations, desires and dreams in the future, and then drawing a "Possible Selves Tree" to present their hoped-for and expected self they would like to achieve and a feared self they would like to avoid in the future. The students were supported to form and share their

thoughts by creating positive atmosphere in the setting and taking part in interviews with a teacher or a counselor either individually or as a part in a small group.

The three studies discussed above all highlight the importance of creating a vision of future selves in intervention program as the basic steps. Without a clear vision of the future self, it is hard for learners to further focus on the plan and practice to make achievements. Therefore, further strengthening the vision will make it become a more powerful contributor to increase the motivation and achievements. However, forming a vivid visionary varies greatly between different individuals and it need practice and specific training (Mackay, 2019). Therefore, some imagery trainings, guiding individuals towards motivating vision of their future ideal self, have been developed and practiced in various fields, especially in sports practice, which proves to be highly effective (Gould, Damarjian, & Greenleaf, 2002).

Arnold et al. (2007) introduced the imagery trainings to the L2 classroom in their book through guided visualization and mental imagery to help students connect to the language meaningfully and enhance their motivation. They provided various strategies usually guided and prompted by teacher's narration to help students "see" objects in their mind's eye and stimulate other senses, which produce meaningful motivation for the learners. For example, the learners are instructed to put a heavy book on their laps, and then close the eyes to imagine holding it as a room. With the narration from the teacher, together with background music, the learners use fingers to trace the "room" and touch different items. Such imagery skills and visualization may help the learners to zoom into the ideal self quickly and strengthening the elaborate visions. In order to help college English majors visualize their Ideal L2 Self vividly, it would be very helpful to adopt some strategies designed by Arnold et al. in the intervention.

Another strengthening vision approach was used in Sheldon and Lyubomirsky's (2006) visualizing best possible selves project, in which the participants were encouraged to outline and write down their ideal future self in details as possible as they can, review their writing and continue doing it over the next couple of weeks. They found that this exercise significantly improved the participants "self-concordant" motivation (p. 80) because the writing task allowed the participants to learn about oneself and gain deeper insight into one's motives values.

All the studies reviewed in this part emphasized the basic and positive role of creating the ideal self in the interventions aiming to improve learners' motivation, performance or achievement. Various strategies, such as creating a possible self tree and describing ideal future self in details, were used to help create and nurture the ideal self and provided evidence to the effectiveness.

**Making the Ideal L2 Self plausible.** A vivid and strengthened ideal self is only effective when it fits individual's particular circumstances. As Pizzolato (2006) suggested, "the relation between what students want to become and what students actually become may be mediated by what students feel they are able to become" (p. 59). An unrealistic ideal self is just imagination and dreams which may not drive students to put effort in achieving it. Therefore, making the ideal self plausible is significant as the next step in the intervention to improve students' motivation.

Oyserman et al. (2002, 2006) in their studies helped the participants to realize the reality component by instructing them to draw role models and negative forces to realize that it was common for everyone to face difficulties on their way to become better selves. The participants further drew their own timelines into the future, presenting the possible forks in the road and obstacles they would face. This strategy helped them to reflect on the particular difficulties they

would face and need to overcome in their specific situations, which formed better action goals in their study. Hock et al. (2006) applied a similar strategy as the fourth component in their program—reflecting. It helped the students to answer the question as “What can I be?”, providing opportunities for them to evaluate their own conditions and set goals. The activity also helped students to realize that in order to achieve their ideal self, they need to fulfill some necessary requirements, such as attending classes regularly and earning GPA 2.5 in all the classes in order to participate in sports as athletic students. This effectively related the ideal self to the learning process, which directed the students’ focus back to learning.

Making the ideal self plausible is the key transitional step for learners to treat their vision of the ideal self seriously and be willing to put efforts in it. Introducing the role models to talk about their experience of overcoming the difficulties on the way to success helps learners realize that hardships are very common if they want to achieve their ideal self and it is necessary to adjust the ideal self adaptable to their particular situations by reviewing their own ideal self. Once the learners construct their ideal self successfully and make it plausible, there comes the next significant step as developing an action plan.

**Developing an action plan.** Nearly all researchers in the possible selves area pointed out that it was almost impossible to achieve the ideal self without a concrete action plan as continuing supportive guide (e.g., Hock et al., 2006; Oyserman et al., 2006; Pizzolato, 2006). Dörnyei (2009) suggested that an effective action plan should contain “a goal-setting component, which is a motivational issue, but it will also include individualized study plans and instructional avenues, which are methodological in nature” (p. 37). An action plan serves as a pathway to activate the individual’s continuous efforts to achieve the ideal self.

Hock et al. (2006) designed components as “Growing” and “Performing” in their intervention to help the students come up with an effective action plan. In the Growing activities, the students were encouraged to consider certain ways to attain their ideal self. They worked with the teacher together to set short- and long-term goals, specific tasks necessarily to be completed and a realistic timeline complete the tasks to finally develop a relatively sound action plan to reach the goals. In this process, they were also instructed to foresee the difficulties they would face and learn certain strategies of adaptation and problem solving. In the Performing activities, students reviewed the whole process including the ideal self they envisioned, the goals established and the action plans they developed regularly to make certain modifications and they may add new goals, expectations and hopes as continuing process. Oyserman et al. (2002, 2006) in their last few sessions of the intervention helping students to practice specific strategies to attain their ideal selves and focusing on solving everyday problems to help them break down everyday school problems into more manageable parts, which reinforces the participants’ ability to make well-developed plans and finally accomplish those plans. For example, the researchers designed springboard as a group activity for participants to handle some school-focused problems in a small group, such as preparing for a big history assignment, by specifying the questions they have and get information to decide what actions they would take. The whole group discussed the questions raised and made decisions.

Developing an action plan and executing it is a necessary way to operationalize the vision and achieve the ideal self. Furthermore, it is not just a once-for-all task but a back-and-forth process. It needs regular revisions and modifications and proper guidance to truly guide the learners realize their ideal self.

**Considering failure as counterbalancing factor.** During the whole process, from constructing the vision to developing and implementing the action plan, the whole context is rather positive and the learners focus on the positive results. However, Oyserman and Markus (1990) suggested that the effectiveness of the ideal self could be maximized by providing learners with their feared self which is the self that they do not want to achieve. Hock et al. (2006) instructed students to consider their feared selves in the activity of drawing the possible tree as a reminder for them to avoid. This condition was not very well developed in the interventions as a concrete strategy, while in language teaching, it might “involve reminders of the limitations of not knowing languages” (Dörnyei, 2009, p. 38).

Oyserman et al. (2002) found that after intervention, urban African American middle school students (n=62 experimental) showed more bonding to school, caring about doing well and having plausible strategies to attain possible selves. They (2006) further proved the previous results in another intervention study after four years with larger sample of 8<sup>th</sup> graders (n=141 experimental) and found that it significantly improved the participants’ academic outcomes and decreased depression, absences and in-school misbehavior. Hock et al.’s (2006) Possible Selves Program targeting students from elementary to post-secondary schools resulted in higher academic performance and higher retention rates and graduation rates for university student-athletes. Sheldon and Lyubomirsky’s (2006) Best Possible Selves intervention was proved to be beneficial for increasing and maintaining students’ positive mood and further enhance their motivation in learning. In L2 learning field, the activities and strategies used in the intervention programs listed above were adapted in the interventions based on the L2 Motivational Self System to promote L2 motivation. Then the L2-specific motivation interventions designed to develop Ideal L2 Self will be discussed in the next part.

### **Ideal L2 Self Interventions**

Several Ideal L2 Self based interventions have been conducted in recent years. The strategies and activities used in those interventions heavily drew on the possible selves interventions reviewed in the previous part.

One influential Ideal L2 Self intervention was conducted by Magid (2014) aiming to motivate English learners to put more efforts in language learning by strengthening the learners' Ideal L2 Self, developing clear goals and action plans, and realizing the feared L2 Self to compensate for the Ideal L2 Self. The participants in this study were all mainland Chinese students ( $n=31$ ) who studied in a British university across various educational levels (undergraduates and graduates) and disciplines.

Some interesting results were presented in this study. The paired-sample t-test showed that participants' Ideal L2 Self was significantly improved after the intervention, with the significant increase of the strength of the Ideal L2 Self compared between the pre- and post-intervention means ( $M = 5.03, SD = 0.82$  to  $M = 5.46, SD = .53, t(30) = -4.40, p < .0005$ ).

As to the interview data, it contained participants explanations of the ratings on the questionnaire. The results highly supported the survey data with more than 80% of the participants interviewed claiming that they had clearer imagery of using English, better vision of Ideal L2 Self and were more motivated to learn English. As a result, they devoted more effort to English learning and spent more time (mean amount of 5 hours more per week) learning English out of the class. Furthermore, they were more confident in language learning.

The general design of Magid's study was mixed-method intervention study with the emphasis on qualitative data without a control group. As to the survey in the study, they used two questionnaires as instruments, one for exploring the participants' expectations of the topics



discussed in the program and their interests, the other one adapted from Taguchi et al.'s (2009) questionnaire used in Japan, China and Iran to collect pre- and post-intervention data to make a comparison. The qualitative part was composed by two semi-structured interviews with each participant lasting for one hour six weeks after the program ended and six weeks after the first interview. The rationalization for the time when interviews were conducted might be the purpose of making it a longitudinal study (Magid, 2011). The questions used in the interviews covered domains of changes of motivation towards learning English, goals for learning English and for the future, Ideal L2 Self, confidence in English, feedback and evaluation of the program and efforts and reasons for learning English.

The structure of the program was based on Oyserman's (2002, 2006) nine-week possible selves School-to-Job intervention program. There were four units highly consistent with the four stages discussed in the previous part. The first unit involved writing participants' Ideal L2 Self in three domains (future jobs, relationships, and lifestyle), writing down any positive and negative role models in each domain. The second unit focused on drawing timeline and making it concrete and realistic by write down the year, everything they hope to happen explicitly and indicate the forks in the road (their difficulties). The third unit dealt with developing a concrete and substantiated action plan and the review of the progress. The last unit instructed participants to counterbalance their ideal self by writing down the feared L2 self. The researchers used Arnold et al.'s (2007) mental imagery skills all through the four units to strengthen the participants' ability to construct the vivid and clear vision.

That the Ideal-L2-Self-based intervention can lead to more motivation and thus the learning efforts were also supported by another study conducted by Chan (2014) with 80 second-year science Chinese university students in an English-medium university in Hong Kong.

In the findings related to the Ideal-L2-Self-based intervention, in addition to the significant enhancement of learners' ideal L2 self after the intervention, their ideal L2 self tended to be extended to various contexts (e.g., at a working-related context, private life) and be more personal. The participants also devoted more efforts in English learning.

As an intervention program, Magid and Chan did not use any control groups and Magid gave the explanation that it was very hard to find a control group with similar strength of the vision of the Ideal L2 Self before the program and the control group should also be given part of the workshops but not exposure to the enhancement of the Ideal L2 Self training.

The design of Chan's intervention program was heavily based on Hock et al.'s (2006) Ideal Selves Tree activity and lasted for 12 weeks in a compulsory university English course. She also included mental imagery training in the sessions similar to Magid in this study. In addition, Chan provided two 20-minute counselling sessions to each participant to give them support in drawing possible tree and any difficulties the participants might have.

As to the research method, Chan also conducted mixed-method intervention study without a control group to investigate the impact of the intervention on motivation. She used a questionnaire to measure the Ideal L2 Self during pre- and post-intervention period, together with qualitative data from 14 participants' interviews.

Mackay (2014) did an Ideal L2 Self intervention with both treatment (n=25) and control group (n=36) in a Catalan EFL context with English learners from a language school of a large Catalan University in order to promote the learners' Ideal L2 Self and investigate its impacts on three components of the L2MSS.

Different from the previous two studies, the quantitative data in this study showed no significant increase of mean scores of any component of the L2MSS and intended English

learning efforts. However, the qualitative data showed a different picture of the changes of Ideal L2 Self, Ought-to L2 Self and L2 Learning Experience. Based on the qualitative data, more participants (n=9) in the treatment group were able to create vivid and clear Ideal L2 Self than the ones in the control group (n=6). More specifically, the participants who received the intervention program articulated their Ideal L2 Self vision in both personal and pragmatic (future job) dimension, which was consistent with the result showed in Chan's (2014) study; while the Ideal L2 Self vision of the control group mainly focused on pragmatic dimension. Mackay suggested that by analyzing the participants responses to the interview questions, the more personal vision of the Ideal L2 Self from the participants in the treatment group became more internalized, which contained more details and subtleness of the Ideal L2 Self descriptions, which were more difficult for survey study to catch and present. Furthermore, the intervention was effective to help learners develop strategies and sustain it to achieve their Ideal L2 Self.

The participants in the treatment group seldom referred to Ought-to L2 Self as one part of their motivation to learn English, with more participants mentioned it in control group. Mackay explained that the lack of data on the Ought-to L2 Self could be caused by intervention which developing the Ideal L2 Self (more internalized part of motivation), causing the learners to “de-emphasize” the Ought-to L2 Self (more externalized part of motivation) by helping participants to focus on the development of the inner self rather than worrying about the external pressures (p. 394). This result suggested that the Ideal L2 Self intervention may change the learners' Ought-to L2 Self.

In addition, Mackay explored the impact of the intervention on learners' L2 learning experience and provided some meaningful insights. The results showed that although most of the participants (12 out of 20 responses) were dissatisfied with their previous language learning

experience at school, they were still able to develop a clear Ideal L2 Self. Furthermore, Mackay (2019) gave more details and explanations on this finding in another published journal article. Although most participants in both groups reported negative L2 learning experience in school, when given a response to the question “What do you think of learning English?” (p. 55), 7 out of 10 participants in treatment group felt “enjoyable” while only three out of control group had such feeling after intervention (p.55). More participants quoted intrinsic motives and the enjoyment of learning English. This suggested that with the Ideal L2 Self intervention, learners may become more aware of the potential for learning English as personal pleasure. The whole intervention lasted for 12 weeks and similar procedures (preparation and visualization training; Ideal, Ought-to and Feared L2 Self visualization; and practical strategies) to the previous studies were adopted in the intervention. The research design was mixed-method with questionnaire and semi-structured interviews.

### **Summary**

In this chapter, research related to the L2MSS since its first proposal in 1995 was systematically reviewed. The quantitative validation of the L2MSS in a number of studies supports the use of the L2MSS theoretical framework in different EFL learning contexts, such as China. The results of the studies presented a strong relationship between Ideal L2 Self and L2 motivation and intended learning efforts. Some studies suggested that there could be some inner-relationship among the three components of the L2MSS, which rationalize the variables proposed in the research questions.

The chapter presented the background on the practical potential of the L2MSS by investigating its theoretical basis and necessary conditions for maximizing the motivating capacity of the framework. The four practical stages proposed by Dörnyei were analyzed in

detail, with examples from some influential studies on the “possible selves” in L2 language learners’ motivation. This part served as the guide of the intervention in my study and provided practical strategies used in the intervention.

The final section provided summaries of selected Ideal L2 Self interventions conducted in recent years. These studies confirmed the use of mixed-method methodology in L2 motivation intervention study, which provided deeper understanding of the change of learners’ motivation. The results of the interventions consistently showed the positive impact of the Ideal L2 Self intervention on learners’ motivation and learning efforts. Among these studies, only one (e.g., Mackay, 2014) explored the impact of the intervention on L2 learning experience. As to the selection of participants, although two studies used Chinese college students as participants, the contexts of both studies were either in England where the Chinese learners may already show relatively high motivation in order to integrate into the culture, or in an English-medium university in Hong Kong where English was used on campus life. Furthermore, the culture was more diversified in Hong Kong than in mainland China. Few intervention studies were conducted with college English majors in mainland China. This intervention study will contribute more evidence to the L2MSS theoretical framework and provide clearer relations among the three components and intended learning efforts. Furthermore, the study will support the practical application of the L2MSS in language teaching and learning.

## CHAPTER 3: METHODOLOGY

### **Purpose of the Study**

The purpose of this mixed-method study is to examine the effects of the Ideal-L2-Self-based intervention on college English majors' L2 selves (the Ideal L2 Self and the Ought-to L2 Self), learners' perception of the L2 Learning Experience and the intended learning efforts needed in L2 learning in China.

### **Research Questions**

Research Question One (RQ1): Will the students' Ideal L2 Self be strengthened as a result of the Ideal-L2-Self-based intervention?

Research Question Two (RQ2): Will the students' Ought-to L2 Self be weakened as a result of the Ideal-L2-Self-based intervention?

Research Question Three (RQ3): Will the students' perception of their L2 Learning Experience be improved as a result of the Ideal-L2-Self-based intervention?

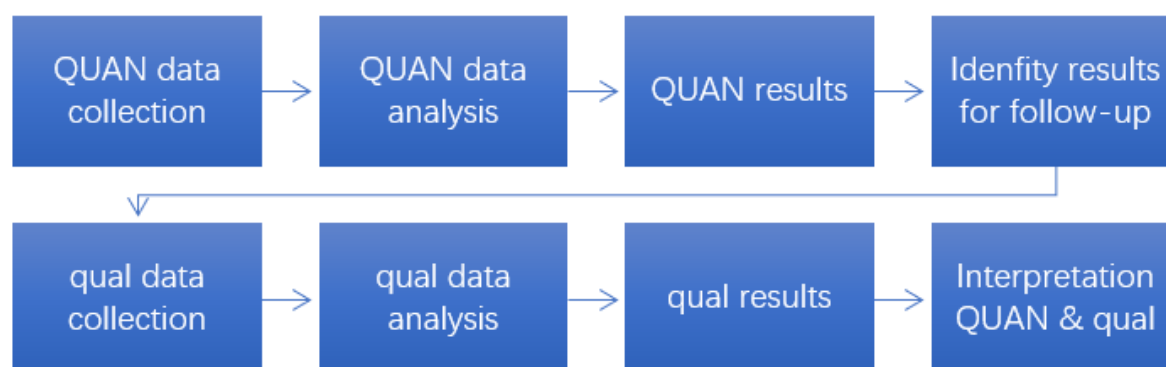
Research Question Four (RQ 4): How does students' Intended L2 Learning Efforts change as a result of the Ideal-L2-Self-based intervention?

### **Research Design**

The general design of the study is quasi-experimental since the participants were not randomly assigned into the experimental conditions. Instead, intact groups were used in this study. The treatment group received the intervention while the control group did not receive any instructions related to the intervention.

An explanatory design—follow-up explanations model was adopted to collect and analyze data to get an in-depth understanding of the impact of the intervention. Larger weighting

was put on the quantitative data. The basic procedure of the model is shown in Figure 1. The survey data were collected in the first phase. Then, the data were analyzed to identify the results that warrant additional investigation. In the second phase, written version of the Ideal L2 Self and interview data were collected and analyzed to explain the results from the quantitative data analysis. Then the results of the qualitative data were presented. Finally, the two kinds of data were mixed in the discussion of the study explaining some specific quantitative findings with the qualitative data to provide a better understanding of participants' motivation. In this study, supportive qualitative data consisted of the participants' written versions of Ideal L2 Self which were produced in the intervention, along with transcripts from interviews.



*Figure 1.* Explanatory design—follow-up explanations model. Adapted from Creswell & Plano (2006, p.73).

This type of mixed method design is especially suitable when a researcher identifies statistically significant differences in the results which need additional explanation to better understand the quantitative results by collecting further qualitative data from the participants who could best help to explain the results (Creswell and Plano, 2006).

The sequence of the overall study is presented by Table 1 below to show stages for the mixed method data collection and the analysis in this intervention study.

Table 1  
*Sequence of the overall study*

	Pre-intervention	During Intervention	Post-intervention	
Quantitative data <sup>1</sup>	√ (Questionnaire)		√ (Questionnaire)	
Qualitative data <sup>2</sup>		√ (Students' written Ideal L2 Self)		√ (Follow-up interview)

<sup>1</sup> collected from all participants; <sup>2</sup> collected from the treatment group only

### Participants

This study utilized a convenience sample by selecting two intact classes of second-year English majors attending the private college in Shanghai, China where I am employed. However, I am not their teacher and have not taught them any course since they were freshmen. From the three classes of second-year English majors that were accessible, two were randomly selected and used as intact groups for this study. The two classes were assigned as treatment and control groups, with 25 students in each class volunteering to take part in the study. Their English learning environments at college were very similar since all the courses arranged for the two classes were the same and taught by the same teachers during the whole semester, which minimized the selection threat. However, the two classes did not mix together to take any English-related course since small-size class teaching is adopted in the college where I work, which did not pose the diffusion of treatment threat. Among the 75 second-year English majors in the college, only 5 were male students, so gender differences were not considered in this study.

The participants for the survey data collection were all the students who took part in the study, including both the experimental and control groups. The participants who were



interviewed were purposefully selected from the treatment group based on their survey data. The amount their scores changed from pretest to posttest reflected the typical change made by the treatment group, as a whole. In other words, five participants in the treatment group who could help to explain the quantitative findings were selected to take part in the follow-up interview.

### **Intervention**

The intervention contained eight whole-group sessions conducted in four weeks, with the frequency of twice a week. The duration time of each session depended on the different stages of the intervention with approximately 30 minutes. In addition to the eight sessions, each student was given two one-on-one counselling sessions with the researcher during the intervention, with each one lasting approximately 15 minutes. The intervention was given to the treatment group as learning activities during their evening classes. The researcher used another classroom in the same building to give the participants intervention sessions.

As to the evening classes, in the college chosen for this study, all the students in their first and second year are required to take compulsory evening classes from 6.30 p.m. to 8.30 p.m. in the classrooms. There are no lectures given to the students and what they do is self-instructed learning during these two hours. The students normally do the homework assignments related to their English-major courses, preview and review the materials related to the courses and read some extra English reading materials such as English novels, magazines and newspapers. It is important to note that, although the control group did not receive any intervention sessions related to motivation, they still spent the same amount of time in English learning following their daily English learning routines of self-study.

As introduced in the second chapter, there are mainly four stages in the practical implementation of the L2MSS, which are constructing the Ideal L2 Self, making the Ideal L2

Self plausible, developing an action plan, and considering failure as a counterbalancing factor. Based on the guided stages, the first three stages were implemented sequentially. The activities of the last stage were merged into the previous three stages. Most of the strategies and activities used in the intervention were based on the previous possible self intervention studies in general educational field (e.g., Hock et al., 2006; Oyserman et al., 2002, 2006; Sheldon & Lyubomirsky, 2006) and Ideal L2 Self intervention studies (Chan, 2014; Mackay, 2014, 2019; Magid, 2014). Some activities were adapted to the specific context in this study to make them more meaningful to the students.

The first three sessions focused on constructing the learners' Ideal L2 Self. The first session aimed to improve participants' awareness and mindfulness of inner self by considering their "possible selves" from the past. In the first session, the use of possible self skills in sports psychology were introduced to participants by some related pictures and a short article to familiarize them with the concept of possible self. Then the participants were instructed to think about their past experience in their L2 learning, such as what kind of dreams, aspirations or desires they once had, what kind of driving forces (e.g., pressures from the parents, peers, or teachers; some role models in their life) made them to have those possible selves and if they realized the dreams, aspirations or desires in the actual life and why. What kinds of factors helped them succeed or fail to realize their dreams of L2 learning? This activity was used to improve the learners' awareness or mindfulness of their inner self, analyzing their strengths and weaknesses in the past experience, which lay the basis for the construction of their Ideal L2 Self. The participants were encouraged to write down the important thoughts on the paper and share them with the other classmates in a positive and supportive atmosphere.

The purpose of the second session was to help the participants surface their Ideal L2 Self in the future. The students were instructed to brainstorm their future dreams, interests, hopes and expectations related to their L2 domain. They were encouraged to expand their Ideal L2 Self into various domains of life, such as work, life style, relationships, hobbies, etc. Then they shared their future Ideal L2 Self with other participants in small groups (5 students a group). After that, the audio recording “My Ideal Language Self” from the book of Arnold et al. (2007, p. 162) (Appendix A) was played to students with them closing their eyes and sitting relaxed in the classroom. Then, there was a very brief discussion for learners to express their feelings of the listening and how vividly they could imagine that situation described in the listening. The participants were assigned a piece of homework to write down their Ideal L2 Self in English in a detailed way and bring it to the next session.

The third session was to strengthen the participants’ vision of Ideal L2 Self. At the beginning, they shared their written Ideal L2 Self with others, with light background music playing to create a relaxing atmosphere. Then they were showed one successful role model (Jack Ma—founder of Alibaba) whose language proficiency was very high and three role models who were students that graduated from the English Department in this college and were currently successful either in graduate school or in their careers. At the end of the session, the participants were encouraged to add anything they want to their written Ideal L2 Self, making it as vivid and clear as possible.

After the first three sessions, the intervention moved into the next stage-- making the Ideal L2 Self plausible by considering the reality with session four and five. With a clear and vivid vision of the Ideal L2 Self, it was important for the vision to be substantiated. Session four focused on helping the participants to consider the obstacles and difficulties they might have on

the way to achieve their Ideal L2 Self. At the beginning of session four, another audio recording “meet the wise person within you” was played to the participants from Arnold’s book (2007, p. 169) (Appendix B) to repeatedly stimulate their skill of imagery. Then the participants briefly wrote down the possible obstacles and difficulties which might prevent them from achieving the Ideal L2 Self, and later these were discussed in pairs. At the end, for homework, the participants were asked to write a timeline (Appendix C) to identify and illustrate their short-term and long-term language learning objectives within a realistic time frame, highlighting the possible obstacles in different periods of time.

Then the participants in session five shared their detailed timeline with the classmates, to check if it was possible to carry out and detailed enough to help them realize the problems that they might face in L2 learning. They further considered the ways to solve the obstacles and discussed it within small groups and shared their possible solutions. This activity was to help the participants fully realize some necessary conditions for them to achieve their Ideal L2 Self by discussing the problems, and ultimately making the participants believe that they could achieve the Ideal L2 Self with careful preparation. At the end of the session, the participants were encouraged to revise their timeline as a homework assignment.

During the gap between session five and six, I conducted a one-on-one counseling session with each participant. The purpose of one-on-one counseling was to provide students with extra help to deal with their personal problems, help them go through their timeline and get some feedback from the participants about their attitudes towards the session.

The last three sessions targeted at developing an action plan to operationalize the vision. Session six was devoted to writing a detailed action plan (Appendix D) concerning the short-term goals based on the objectives they set in the timeline. In other words, they were to consider

what strategies they should take to achieve the goals set for this week, this month and this semester these goals. The action plan should be as concrete and detailed as possible with the proper time distribution. The participants shared their action plan with others and then revised it after the session.

In session seven, the participants wrote an action plan for the long-term goals (whole college life, future work and personal life) based on the previous one and tried to make the two related and consistent. And they checked their action plan set for that week to see if the objectives were achieved. If not, they considered why they did not make it happen. After the session, the participants were encouraged to revise their action plans repeatedly.

The last session focused on the reviewing and reflecting the whole action plan within the time line. The participants shared the highlights of their action plan with others. For example, how they modified their action plan, what goals in the action plan had already been attained, if they added some new goals, hopes and expectations in their action plans. They were also encouraged to express their fears and concerns related to their Ideal L2 Self and action plans. After the session, they were asked to make any change of their description of the Ideal L2 Self if they thought it was necessary.

A second individualized counseling session was provided after the eighth session with the purpose of giving participants encouragement to achieve their Ideal L2 Self after the intervention ends. Advice was given to the students if they raised any questions. The sessions in the intervention are summarized in Table 2 below and the action plans of the sessions are listed in Appendix H.

Table 2  
*Summary of the Intervention*

Session	Stage / Purpose	Activities
1	Constructing Ideal L2 Self	a. playing short video of possible self skills b. reflecting on and analyzing past experience in L2 learning and writing things down (dreams, hopes, expectations, etc.)
2	Constructing Ideal L2 Self	a. brainstorming future dreams, hopes, expectations and interests in various domains of life and share them b. playing audio recording “My Ideal Language Self” and discussing it c. writing down Ideal L2 Self as homework
3	Constructing Ideal L2 Self	a. sharing written Ideal L2 Self; being presented with successful role models b. making revisions on Ideal L2 Self
4	Making Ideal L2 Self plausible	a. imagery audio recording played b. writing down obstacles and discuss them c. writing a timeline as homework
5	Making Ideal L2 Self plausible	a. discussing the timeline b. considering ways to solve problem on the timeline and share the solutions c. revising the timeline as homework
	Counseling	
6	Developing action plan	a. writing detailed action plan concerning short-term goals and share with classmates b. revising the plan as homework
7	Developing action plan	a. writing action plan for the long-term goals b. examining the completion of part of their short-term action plan
8	Developing action plan	a. reviewing and reflecting on the whole action plans with the timeline b. expressing fears and concerns of their Ideal L2 Self c. making any necessary change on Ideal L2 Self after the session
	Counseling	

## Instruments

### L2 Motivation Questionnaire

The L2 Motivation Questionnaire (Appendix E) was used to collect quantitative data pre- and post-intervention in the study. There were 22 six-point Likert Scales items which were taken from the original L2 motivation questionnaire designed by Taguchi et al. (2009). The original questionnaire had three versions which were in Chinese, Japanese, and Iranian with a few slightly different items adjusted to fit the specific cultural context and was used to validate L2MSS. Later, it was validated by several other studies using either the original or adapted version to conduct L2MSS validation or intervention study (e.g., Ryan, 2009; Magid, 2014). The

Chinese version questionnaire written in English with Chinese translation was administered to 1,328 participants ranging in age from 11 to 53 with a mean age of 21.1 to analyze their motivation in China. There were 10 factors in the Chinese version of the questionnaire, including intended L2 learning efforts, Ideal L2 Self, Ought-to L2 Self, family influence, instrumentality-promotion, instrumentality-prevention, L2 learning experience, attitudes to L2 community, cultural interest and integrativeness. Among the factors above, only five were relevant to this study as Ideal L2 Self, Ought-to L2 Self, L2 Learning Experience, Intended L2 Learning Efforts and family influence. Since family influence in a few studies was proved to exert great influence on Ought-to L2 Self (e.g., Taguchi et al., 2009; Csizér and Kormos, 2009), family influence factor was combined with the Ought-to L2 Self in this study. All the items in the questionnaires were presented to the participants in both English and Chinese in the same form. Table 3 summarizes the factors with items and Cronbach Alphas. Since the internal consistency of the family influence combined with the Ought-to L2 Self was not reported in the previous studies which analyzed the Ought-to L2 Self with family influence, the Cronbach Alphas of the family influence will be listed separately in the factor of Ought-to L2 Self in Table 3. The use of this original questionnaire was granted by the original designer, Professor Dörnyei, through email on July. 20, 2018.

Table 3  
*Summary of the Factor Items and Cronbach Alphas*

Factor name	Items with Cronbach Alphas	
	Items	$\alpha$
1. Intended L2 Learning efforts	1. I think that I am doing my best to learn English. 5. I would like to spend lots of time studying English. 8. I am prepared to expend a lot of effort in learning English. 12. I would like to concentrate on studying English more than any other topic. 13. Compared to my classmates, I think I study English relatively hard. 17. If an English course was offered in the future, I would like to take it.	0.75

(Table 3 Continued)

2. Ideal L2 Self	3. I can imagine myself living abroad and having a discussion in English. 6. I imagine myself as someone who is able to speak English. 10. I can imagine myself speaking English as if I were a native speaker of English. 14. I can imagine myself speaking English with international friends or colleagues. 19. Whenever I think of my future career, I imagine myself using English.	0.83
3. Ought-to L2 Self	2. I study English because close friends of mine think it is important. 4. I consider learning English important because the people I respect think that I should do it. 21. Learning English is necessary because people surrounding me expect me to do so. 9. Studying English is important to me in order to gain the approval of my peers/ teachers/ family. <b>Family influence</b> 11. Being successful in English is important to me so that I can please my parents. 15. My family put a lot of pressure on me to study English. 22. My parents /family believe that I must study English to be an educated person.	0.78       0.70
4. L2 Learning Experience	16. Do you like the atmosphere of your English classes? 18. Do you find learning English really interesting? 20. Do you always look forward to English classes? 7. Do you really enjoy learning English?	0.81

### Interview Protocol

Interview protocol (Appendix F) was used to collect qualitative data as follow-up to describe the results of the quantitative data. It contained 7 open-ended questions related to four categories: Intended L2 Learning Efforts, Ideal L2 Self, Ought-to L2 Self and L2 Learning Experience. The researcher wrote the questions based on the L2MSS theoretical framework and the items in the L2 Motivation Questionnaire in order to collect the data which will give further explanation of the quantitative results. All the questions were designed to focus on the change of the four dependent variables before and after the intervention. The researcher translated all the questions from English into Chinese. In order to make the equivalence of the two versions, one of the researcher's colleagues who is a professor teaching English at English department did the back translation by translating the Chinese version of the items into English version and then



comparing the two versions. When answering these questions, the participants could choose either English or Chinese as long as they feel comfortable to express themselves in their chosen language. The questions are summarized in Table 4:

Table 4  
*Summary of the Interview Protocol*

Category	Questions
Intended L2 Learning Efforts	1. How do you think about your English learning before and after the intervention? What kind of changes of your English learning efforts have you noticed after the intervention?
Ideal L2 Self	2. How would you use English for in the future after you graduate from the college? 3. Could you describe what you would ideally like to become as an English learner as detailed as possible?
Ought-to L2 Self	4. How will others' opinion influence your English learning? 5. How does it change before and after the intervention?
L2 Learning Experience	6. How do you enjoy your English learning? 7. How have your perceptions of your English learning experience changed before and after the intervention?

### **Written Versions of Ideal L2 Self**

The written version of their Ideal L2 Self is of particular interest given the focus of the intervention. The process of writing activity, which provided participants with full opportunity to correct, expand and rewrite their Ideal L2 Self all through the intervention, gave them the freedom to develop the vision and then the change of their Ideal L2 Self was analyzed by comparing different stages of the written work. Permission was obtained from the participants to allow the researcher to copy their written work in different stages and return to them to keep.

### **Data Collection**

After obtaining the consent form (Appendix G) from the participants, the L2 Motivation Questionnaire was distributed to both treatment and control groups in the evening classes by the researcher. Then the students completed it on their own and put it on the front desk in the classroom once they finished filling the questionnaire. The researcher left the classroom during

the students' filling the form and came back to collect the questionnaire in approximately 40 minutes. All the participants put their names, grades and email address on the form in order to help me match the pretest and posttest scores and contact them (students in treatment group) for possible further interview study. The questionnaire was collected one week prior to the intervention. During the intervention, the documents of the students--the version of Ideal L2 Self written by the treatment group were collected and copied after session two and returned it to them. Then, at the end of the intervention, their revised versions of Ideal L2 Self were collected, copied and then returned to them. When the intervention finished, the same L2 Motivation Questionnaire was distributed to the participants in both experimental and control groups and then collected one day after the intervention.

After the analysis of the quantitative data collected through the questionnaire, further one-on-one interviews as the second phase of the data collection were conducted by the same researcher. The participants were purposefully selected based on their quantitative data which typically represents the trend of the change of dependent variable in each research question. Only the qualified participants who indicated interest in taking part in the follow-up interview in the consent form were contacted and finally included in the second phase of data collection. Finally, five participants in the treatment group were selected. All the interviews were audio recorded and transcribed by the researcher.

Approval for this study was obtained from the University of the Pacific's Institutional Review Board for the Protection of Human Subjects prior to any data collection. Once the intervention began, the participants had the right to withdraw anytime they like in both phases of data collection. All their data collected was assured to keep confidential, with only research purpose in this study.

## **Data Analysis**

### **Quantitative Data Analysis**

ANCOVA was used as the main data analysis method to evaluate the changes of the four dependent variables before and after the intervention. This data analysis is appropriate in an intervention study when “treatments can be randomly assigned to groups but subjects cannot be randomly assigned to treatment groups” (Hinkle, Wiersma, & Jurs, 2003, p. 498). ANCOVA uses pretest scores, as the covariate, to statistically adjust the posttest scores in an effort to help compensate for any preexisting differences that may be present between the experimental conditions prior to the intervention.

In order to assure the proper use of ANCOVA in this study, two major assumptions underlying ANCOVA (linear relationship and homogeneity of regression) should be analyzed first (Hinkle et al., 2003). In this study, there were four dependent variables: post-intervention results of the intended efforts, Ideal L2 Self, Ought-to L2 Self and L2 Learning Experience. The pretest scores were used as covariates and the intervention (group) was independent variable. First, pretest and posttest scores in each group (experimental and control group) were analyzed to see if there existed linear relationship by using scatter plots analysis. Second, homogeneity of regression was conducted to see if there was an interaction between the covariate and the treatment. The regression lines of pretest and posttest scores in both experimental and control groups were analyzed to see if they are parallel. If there existed parallel slopes, then one-way ANCOVA could be further conducted to analyze the results.

One-way ANCOVA was used to analyze data for all four research questions. To address research question one, the posttest score of Ideal L2 Self served as the dependent variable and group (treatment and control) was the fixed factor with the pretest score of Ideal L2 Self as

covariate. To address research question two, the posttest score of Ought-to L2 Self was the dependent variable and group was the fixed factor with the pretest score as covariate. To address research question three, the posttest score of L2 Learning Experience was the dependent variable and group was the fixed factor with the pretest score as covariate. To address research question four, the posttest score of intended efforts was the dependent variable and group was the fixed factor with the pretest score as covariate. For each research question, if the F value exceeded the critical value  $F(cv)$ , then it could be concluded that there was evidence to suggest that a difference existed between the adjusted means of treatment group and control group and then the means could be compared between two groups. For all statistical tests in this study, an alpha of .05 was employed.

### **Qualitative Data Analysis**

Content analysis was adopted to analyze the participants' responses to the open-ended questions in the interview and participants' written versions of Ideal L2 Self in the treatment group.

As to the qualitative data of the interview, four coding categories as Ideal L2 Self, Ought-to L2 Self, L2 Learning Experience and Intended L2 Learning Efforts were used to analyze and categorized participants' responses in the interview, which presented the participants' self-reflection of the change of the facets of motivation. Then, the transcription belonged to each category was further analyzed to identify the emerging themes which could help to confirm and further describe the survey results.

As to the participants' written versions of Ideal L2 Self, three coding categories were adopted as strengthening (the description of the Ideal L2 Self becoming more clear and vivid), remaining stable (no significant change of the description of the Ideal L2 Self), and weakening

(the description of the Ideal L2 Self becoming less clear and vivid). The coding category was based on Chan's intervention study (2014). She employed three coding categories as "emergent (selves which were not present at Time 1 but present at Time 2), fading (selves which were present at Time 1 but not at Time 2) and stable (selves which were present both at Time 1 and Time 2)" to analyze the change to students' L2 selves before and after the intervention (p. 365). Since the participants started to write down their Ideal L2 Self at the end of the Session Two in the intervention, they should have a basic idea of the Ideal L2 Self. So, the two coding categories as emergent and fading were replaced by strengthening and weakening in this study.

### **Summary**

In this chapter, the researcher described the study design as quasi-experimental study and adopted explanatory mixed method—follow-up explanations model. The intervention with eight sessions was explained. Finally, the instruments used in this study were examined together with data collection and analysis plans.

## CHAPTER 4: RESULTS

### Introduction

The purpose of this study was to examine the effects of the Ideal-L2-Self-based intervention on the development of college English majors' L2 selves (the Ideal L2 Self and the Ought-to L2 Self), learners' perception of the L2 Learning Experience and the intended learning efforts needed in L2 learning in China. Based on the analysis of L2MSS and the previous Ideal-L2-Self-based intervention studies (Chan, 2014; Mackey, 2014; Magid, 2014), four research questions were posed in this study to explore whether the Ideal-L2-Self-based intervention would strengthen students' Ideal L2 Self, weaken Ought-to L2 Self, improve perception of L2 Learning Experience and affect Intended L2 Learning Efforts. The Ideal-L2-Self-based intervention was conducted among second-year college English majors in a private college in Shanghai who were divided into two intact groups as experimental and control group. Both quantitative data (the pre- and post-intervention questionnaire) and qualitative data (the during-intervention documents and follow-up interviews) were collected to analyze the change of students' L2 motivation in this quasi-experimental design with follow-up explanations model. The purpose of this chapter is to present the results of the Ideal-L2-Self-based intervention study, trying to answer four research questions. The first section of this chapter will present the statistical analysis of the survey data, including the statistical assumptions, general data, the quantitative analysis of the effects of the intervention on students' Ideal L2 Self, Ought-to L2 Self, L2 Learning Experience and Intended L2 Learning Efforts. The second section of this chapter will present the analysis of the findings of qualitative data (written version of Ideal L2 Self and interview) as a follow-up data collection to further describe the results identified in the quantitative data analysis.

## Quantitative Data Results

### Statistical Assumptions

In this quasi-experimental study, ANCOVA was used to evaluate the effects on the four dependent variables impacted by the intervention. Two major assumptions, including linear relationship and homogeneity of regression were analyzed first to determine whether it is appropriate to use ANCOVA. As to the linear relationship, each pair of the dependent variable (post-intervention result) and covariate (pre-intervention result) in four research questions were examined by adopting scatter plots analysis. The results indicated that for Ideal L2 Self, there were mild linear relationships between dependent variable and covariate of both control ( $R^2 = 0.358$ ) and treatment ( $R^2 = 0.529$ ) groups. The mild linear relationships existed for Ought-to L2 Self (control  $R^2 = 0.393$ , treatment  $R^2 = 0.589$ ); L2 Learning Experience (control  $R^2 = 0.38$ , treatment  $R^2 = 0.425$ ) and Intended L2 Learning Efforts (control  $R^2 = 0.357$ , treatment  $R^2 = 0.574$ ) as well (Appendix I). The linear relationships between the pairs of related covariate and dependent variables were not very strong in magnitude; however, the scatterplots did not suggest the presence of non-linear relationships. Thus, the assumption of linear relationships was satisfied for all four outcomes.

Homogeneity of regression as the second main assumption was examined to check if there was an interaction between the covariate and the treatment. The results indicated that there were no interactions between the covariate and the intervention for Ideal L2 Self ( $F=.008$ ,  $p=.929$ ), Ought-to L2 Self ( $F=1.887$ ,  $p=.176$ ), L2 Learning Experience ( $F=.057$ ,  $p=.812$ ) and Intended L2 Learning Efforts ( $F=.102$ ,  $p=.751$ ) (Appendix J). Thus, there was insufficient evidence to suggest the regression lines for the groups were not parallel.

### Research Question One

The research question one (RQ1) was whether the students' Ideal L2 Self will be strengthened as a result of the Ideal-L2-Self-based intervention. To address research question one, the posttest score of Ideal L2 Self was used as dependent variable and group (treatment and control) was the fixed factor with the pretest score of Ideal L2 Self as covariate by using ANCOVA analysis. The descriptive statistics and the ANCOVA results are shown in the following Tables 5 and 6.

Table 5

*Summary of Pretest Means, Adjusted and Unadjusted Posttest Means with Pretest Means as a Covariate on Ideal L2 Self.*

Group	N	Pretest scores		Posttest scores			
				Unadjusted		Adjusted	
		Mean	SD	Mean	SD	Mean	SE
Treatment	25	4.14	.95	4.69	.80	4.70	.14
Control	25	4.18	.97	4.06	1.02	4.05	.14

*Note.* SD=standard deviation, SE=standard error

Table 6

*Summary ANCOVA for Post-intervention Result of Ideal L2 Self*

Source	SS	df	MS	F	Sig.	Partial Eta Squared
Covariate	16.993	1	16.993	34.497	.000	.423
Between	5.259	1	5.259	10.677	.002	.185
Within	23.151	47	.493			
Total	45.011	49				

\*  $p < .05$

The descriptive data in Table 5 show that for treatment group, the strength of the Ideal L2 Self increases by 0.55 compared with pretest score ( $M = 4.14$ ,  $SD = 0.95$ ) and posttest score ( $M = 4.69$ ,  $SD = 0.80$ ). However, the strength of the Ideal L2 Self of the control group decreases by 0.12 compared with pretest score ( $M = 4.18$ ,  $SD = 0.97$ ) and posttest score ( $M = 4.06$ ,  $SD = 1.02$ ).



For ANCOVA analysis, Table 6 shows that there is a significant effect of Ideal-L2-Self-based intervention on students' posttest level of Ideal L2 Self after controlling for their pretest level,  $F(1,47) = 10.677, p = .002$ . The adjusted posttest score of the treatment group ( $M = 4.70, SE = 0.14$ ) exceeds that of the control group ( $M = 4.05, SE = 0.14$ ) suggesting that the intervention had a positive impact on the Ideal-L2-Self. The calculated effect size ( $\eta_p^2 = .185$ ) is considered large, based on guidelines offered by Cohen (1988) where .01, .06, and .14 are considered small, medium, and large effects, respectively.

### Research Question Two

The research question two (RQ2) was whether the students' Ought-to L2 Self will be weakened as a result of the Ideal-L2-Self-based intervention. To address research question two, the posttest score of Ought-to L2 Self was used as dependent variable and group (treatment and control) was the fixed factor with the pretest score of Ought-to L2 Self as covariate by using ANCOVA analysis. The results are shown in the following Tables 7 and 8.

Table 7  
*Summary of Pretest Means, Adjusted and Unadjusted Posttest Means with Pretest Means as a Covariate on Ought-to L2 Self.*

Group	N	Pretest scores		Posttest scores			
				Unadjusted		Adjusted	
		Mean	SD	Mean	SD	Mean	SE
Treatment	25	3.29	1.03	3.02	1.15	2.87	.17
Control	25	2.85	1.29	3.16	1.17	3.31	.17

Note. SD=standard deviation, SE=standard error

Table 8  
*Summary ANCOVA for Post-intervention Result of Ought-to L2 Self*

Source	SS	df	MS	F	Sig.	Partial Eta Squared
Covariate	30.170	1	30.170	41.464	.000	.469
Between	2.313	1	2.313	3.179	.081	.063

(Table 8 Continued)

Within	34.199	47	.728
Total	64.625	49	

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\*  $p < .05$

The descriptive data in Table 7 show that for treatment group, the strength of the Ought-to L2 Self decreases by 0.27 compared with pretest score ( $M = 3.29$ ,  $SD = 1.03$ ) and posttest score ( $M = 3.02$ ,  $SD = 1.15$ ). However, the strength of the Ought-to L2 Self of the control group increases by 0.31 compared with pretest score ( $M = 2.85$ ,  $SD = 1.29$ ) and posttest score ( $M = 3.16$ ,  $SD = 1.17$ ).

For ANCOVA analysis, Table 8 shows that there is no statistically significant effect (using  $\alpha = .05$ ) of Ideal-L2-Self-based intervention on students' posttest score of Ought-to L2 Self after controlling for their pretest score,  $F(1, 47) = 3.179$ ,  $p = .081$ . However, it is worth noting the adjusted mean of the Ought-to L2 Self after the intervention was lower for the treatment group ( $M = 2.87$ ,  $SE = 0.17$ ) than the control group ( $M = 3.31$ ,  $SE = 0.17$ ) as expected, and, the calculated effect size ( $\eta_p^2 = .063$ ) would be considered a medium effect, using Cohen's (1988) guidelines.

### Research Question Three

The research question three (RQ3) was whether the students' perception of their L2 Learning Experience will be improved as a result of the Ideal-L2-Self-based intervention. To address research question three, the posttest score of L2 Learning Experience was used as dependent variable and group (treatment and control) was the fixed factor with the pretest score of L2 Learning Experience as covariate by using ANCOVA analysis. The results are shown in the following Tables 9 and 10.

Table 9

*Summary of Pretest Means, Adjusted and Unadjusted Posttest Means with Pretest Means as a Covariate on L2 Learning Experience.*

Group	N	Pretest scores		Posttest scores			
				Unadjusted		Adjusted	
		Mean	SD	Mean	SD	Mean	SE
Treatment	25	3.89	.91	4.54	.91	4.55	.15
Control	25	3.91	1.00	3.98	.98	3.97	.15

*Note.* SD=standard deviation, SE=standard error

Table 10

*Summary ANCOVA for Post-intervention Result of L2 Learning Experience*

Source	SS	df	MS	F	Sig.	Partial Eta Squared
Covariate	17.144	1	17.144	31.376	.000	.400
Between	4.096	1	4.096	7.496	.009	.138
Within	25.681	47	.546			
Total	46.745	49				

\*  $p < .05$

The descriptive data in Table 9 show that for the treatment group, the result of students' perception of L2 Learning Experience increases by 0.65, compared with pretest score ( $M = 3.89$ ,  $SD = 0.91$ ) and posttest score ( $M = 4.54$ ,  $SD = 0.91$ ). The result of student's perception of L2 Learning Experience of the control group increases by 0.07, compared with pretest score ( $M = 3.91$ ,  $SD = 1.00$ ) and posttest score ( $M = 3.98$ ,  $SD = 0.98$ ).

For ANCOVA analysis, Table 10 shows that there is a significant effect of Ideal-L2-Self-based intervention on students' post-intervention results of L2 Learning Experience after controlling for their pre-intervention results,  $F(1,47) = 7.496$ ,  $p = .009$ . The adjusted posttest score of the treatment group ( $M = 4.55$ ,  $SE = 0.15$ ) exceeds that of the control group ( $M = 3.97$ ,  $SE = 0.15$ ) suggesting that the intervention had a positive impact on the Learning Experience. The calculated effect size ( $\eta_p^2 = .138$ ) is considered large, based on guidelines offered by Cohen (1988).

### Research Question Four

The research question four (RQ4) was how students' Intended L2 Learning Efforts will change as a result of the Ideal-L2-Self-based intervention. To address research question four, the posttest score of Intended L2 Learning Efforts was used as dependent variable and group (treatment and control) was the fixed factor with the pretest score of Intended L2 Learning Efforts as covariate by using ANCOVA analysis. The results are shown in the Tables 11 and 12.

Table 11

*Summary of Pretest Means, Adjusted and Unadjusted Posttest Means with Pretest Means as a Covariate on Intended L2 Learning Efforts.*

Group	N	Pretest scores		Posttest scores			
				Unadjusted		Adjusted	
		Mean	SD	Mean	SD	Mean	SE
Treatment	25	4.33	.87	4.69	.73	4.66	.13
Control	25	4.24	.83	3.97	1.00	4.00	.13

*Note.* SD=standard deviation, SE=standard error

Table 12

*Summary ANCOVA for Post-intervention Result of Intended L2 Learning Efforts*

Source	SS	df	MS	F	Sig.	Partial Eta Squared
Covariate	15.825	1	15.825	35.700	.000	.432
Between	5.459	1	5.459	12.315	.001	.208
Within	20.835	47	.443			
Total	43.147	49				

\*  $p < .05$

The descriptive data in Table 11 show that for treatment group, the result of students' Intended L2 Learning Efforts increases by 0.36, compared with pretest score ( $M = 4.33$ ,  $SD = 0.87$ ) and posttest score ( $M = 4.69$ ,  $SD = 0.73$ ). However, the result of student's intended learning efforts of the control group decreases by 0.27, compared with pretest score ( $M = 4.24$ ,  $SD = 0.83$ ) and posttest score ( $M = 3.97$ ,  $SD = 1.00$ ).

For ANCOVA analysis, Table 12 shows that there is a significant effect of Ideal-L2-Self-based intervention on students' post-intervention results of Intended L2 Learning Efforts after controlling for their pre-intervention results,  $F(1,47) = 12.315, p = .001$ . The adjusted posttest score of the treatment group ( $M = 4.66, SE = 0.13$ ) exceeds that of the control group ( $M = 4.00, SE = 0.13$ ) suggesting that the intervention had a positive impact on Intended L2 Learning Efforts. The calculated effect size ( $\eta_p^2 = .208$ ) is considered large, based on guidelines offered by Cohen (1988) where .14 is considered to be a large effect.

### **Qualitative Data Findings**

A series of interviews were conducted as the second phase of the study to explain any changes in student motivation that were identified in the survey as a result of the intervention. To identify reasons for the changes, I analyzed students' written versions on their Ideal L2 Self and students' responses in the interviews. As to students' written version of their Ideal L2 Self in treatment group ( $n=25$ ), the students were invited to write down their Ideal L2 Self in the second session of the intervention as the first time (T1) version. Then, they were encouraged to revise it at any time during the whole intervention, and finally presented the Ideal L2 Self after the last session as the second time (T2) version. By comparing two versions of the first and second time, three coding categories were adopted as strengthening, remaining stable, and weakening concerning the change of Ideal L2 Self.

As to the interview data, five students were selected from the treatment group who best represented the trend of the whole group on each variable, which means that each interview participant's Ideal L2 Self, L2 Learning Experience and Intended L2 Learning Efforts improved, while Ought-to L2 Self decreased after the intervention. Each student was invited to reflect on the change of their own Ideal L2 Self, Ought-to L2 Self, L2 Learning Experience, and Intended

L2 Learning Efforts before and after the intervention, which helped to provide informative and insightful explanation of the quantitative results. Among the five participants, four were female students and one was male student. They received the interview individually and each interview lasted for approximately 30 minutes. In the interview, four of the participants chose to give responses in English. One participant chose to use Chinese in the interview, so the questions I asked and the responses she gave were all in Chinese. After the interview, I translated what she reported in the interview into English. All the names of the interviewees used in this part were pseudonyms, including Dora, Lily, Alice, Mary and Jay. In the following part, the qualitative data findings will be divided into four categories as Ideal L2 Self, Ought-to L2 Self, L2 Learning Experience and Intended L2 Learning Efforts, correspondent to four research questions to present the changes of motivation.

### **Strengthened Ideal L2 Self**

The qualitative data about Ideal L2 Self drew on both students' written versions and the interviews.

**Written Ideal L2 Self.** By comparing students' T1 and T2 written versions of Ideal L2 Self, 19 out of 25 students' description was coded as strengthening. The strengthening trend was reflected by mainly two aspects. The first aspect is broadening areas of using English in the future, from focusing solely on the working and studying situation to including more areas such as traveling, family and hobbies. For example, one student (Vivi) in the treatment group wrote her Ideal L2 Self at the first time (T1) as following:

“To be honest, I am not certain what I really want to do in the future now. However, I imagine I teach my students at school after Amy's explanation in the class. In that picture, I am teaching about the language point of English, with a white chalk. My students are answering the question actively, rolled into one. According to this picture, perhaps I will be an English teacher in the future. But that is only a speculation so far.”

The T1 version of Vivi's Ideal L2 Self concentrated only on her future job related to English. She described a picture of future use of English but was very vague. Then at the end of the intervention, Vivi's T2 Ideal L2 self was broadened to the use of English in three areas as work, life, and entertainment. She wrote like this:

“In the future, I hope that my spoken English will be more and more fluent and natural, with the training of language usage. There are three views to express my ideal life, work or entertainment respectively.

From life angle of view, I would use English to communicate with foreigners from all over the world. I have the privilege to know more sensitive messages and information, even if some messages are written by English. Moreover, I would help some people to know other people's meaning during the communication. In my imagination, in the gorgeous restaurant, a table with a magnificent table, I sat on the chair to accompany with a wealthy and beautiful woman. I communicate with her about her life. I speak fluent English to discuss things with her.

From job angle of view, I am eager to explore the meaning and usage of each word in every passage. I read everything in English without great efforts and can understand things easily. From entertainment angle of view, I use English to guide other people to travel the historical sites. I like talking with others and have communication to understand different cultures. I will have a lot of friends all over the world because my English is very good.

Now, let dreams go back to reality. I still need to work hard and learn more knowledge of English.”

Vivi not only described her Ideal L2 Self in various areas, but her vision was more vivid and concrete as well. Furthermore, she connected the vision of the future with the reality of the study at present by focusing on her English learning in university to help her achieve all those goals at the end of the writing.

The second aspect reflecting strengthening trend of Ideal L2 Self is that many students' final version provides much more vivid description of their use of English in the future. Alice's T1 and T2 version was a typical example. Alice's T1 version of Ideal L2 Self is a very short paragraph on three points: future teaching job, communication with foreigners and teaching her own children English. As to the future teaching job, she wrote just one sentence as “first of all, I think I should teach my children to learn in fluent English at school. I can read some English

books, magazine, news and so on.”. Then in her T2 version of Ideal L2 Self, she added more details to the vision of future English teaching job. She wrote as the following:

“... I want to be a primary school English teacher in my hometown Guizhou and a school close to my home, ...I hope to teach children in half Chinese and half English, because the overall English level in my hometown is not very good, and teaching children in all English may be beyond their comprehension. ... Therefore, I hope that when I teach my children there, I will let them listen more to English listening, and let them contact more knowledge related to English. When they can understand a little English, I will teach them all English and grind their ears. Of course, I hope to make the atmosphere more active in teaching and in the classroom, because learning English is a bit boring, and I can do small English activities in the classroom. ...”

Alice’s vision of the future Ideal L2 Self became more concrete and included more details related to the teaching job. She considered the school where she would like to teach, what percentage of the use of English in teaching, what skill of language she would like to focus on and how to improve the atmosphere of the class. By constructing the Ideal L2 Self, she formed clearer aims for the future and pondered on some fears related to the Ideal L2 Self. At the end of her T2 version, she wrote, “... but I focused on broadening my knowledge. However, when the problem arises, I don’t know from which aspects I can broaden my knowledge. I have to think about it, I hope I can have a detailed plan for myself after communicating with the teacher.” She realized the importance of making her Ideal L2 Self plausible by fully considering the problems and trying to solve them by developing detailed action plan.

The above comparison of T1 and T2 versions demonstrates the strengthening trend of Ideal L2 Self after students receiving the Ideal-L2-Self-based intervention. However, 6 out 25 students in the treatment group did not show strengthening trend and the change of their Ideal L2 Self was coded as remaining stable. The students either described one area of Ideal L2 Self in T1 version and another area in T2 version or simply described two different situations of the



ideal use of English in two versions, in similarly detailed way. For example, Daisy wrote a situation of a sunny afternoon in T1 version:

“... I stood confidently on the platform and kept English teaching. I not only trained students’ gift of tongues but also trained their active confidence of English learning. This unit is about music. The text mentioned the types of music, so I played various types of music melody to the students. And let the students guess which type the music is. ... Class is over!”

In her T2 version, she simply changed the situation to a snowy day in Ottawa. She went out to class and bought some daily necessities and cat food in Walmart and then went back home. The length of the two versions were similar and she did not add any new aspects of Ideal L2 Self in the final version. As to the weakening trend of the Ideal L2 Self, no students in the treatment group were coded into this category. The written versions of students’ Ideal L2 Self at the beginning and end of the intervention demonstrated that students’ Ideal L2 Self was strengthened as the result of the Ideal-L2-Self-based intervention. The summary of the results of students’ written version of Ideal L2 Self is listed in Table 13:

Table 13  
*The Direction of Change in Ideal L2 Self*

Strengthening Ideal L2 Self	Remaining stable Ideal L2 Self	Weakening Ideal L2 Self
19/25	6/25	0

*Note.* N=25.

**Interview.** During the interview, all the participants reflected that they had better vision of the Ideal use of English in the future. Three themes emerged from the analysis of the responses as extended dimensions of English use in the future, vivid vision of Ideal English use and strengthened confidence in forming vision of Ideal English use.

***Extended dimensions of English use in the future.*** When asked how they would use English in the future after graduation, all five students responded that they would definitely use English in at least three areas of life, such as work, study, travel, friendship or family life. Four of them mentioned that they had never thought English was so useful in various areas of life before the intervention. For example, Lily discussed her use of English after graduation:

“At home, I’ll teach my younger brother English and using English to communicate with him in daily life. At work, I’ll read many English magazines, picture books or other related English materials to help me teach kindergarten kids. In leisure time, I’ll translate some short articles, just for fun. Oh, I will definitely use English in my travelling because I don’t like package tour at all. Well, I think I can use English in many areas and I think it is necessary. I have stronger and stronger belief that everyone should master English. I didn’t have such feeling before this semester.”

Another student Mary mentioned that she would use English after graduation in work since she wanted to be an English teacher. Then she would travel abroad and communicate with the local people in English. In addition, she loved watching English movies with original soundtrack and no subtitles, so English would be important for her pursuits both professionally and personally. For her, learning English was not just for good grades and better job, it meant a lot in her life. After the intervention, the students’ vision of English use extended from study or work to broader areas (friendship, family life, hobby, and travel) in their life, which were more personal.

***Vivid vision of ideal English use.*** When asked whether they could describe what they would ideally like to become as an English user in the future, all the participants gave responses without much hesitation and could describe it in details during the interview. For instance, Jay described his future job as an English teacher:

“...I want to become an English teacher different from my previous English teachers. My teachers at middle school relied too much on out-of-date textbooks. The English lesson was very boring. I have a vision that I will provide my students with a lot of interesting learning materials and include many activities in my class. For example, I will give students dubbing

materials to make practice and have dubbing competition to improve their oral English. You know, there are many Apps to help students practice listening and oral English. I will use the textbook, but I will add a lot of extra things to it. The textbook, you know, sometimes is out of date and the texts are so boring. And, hmmm, more group work for my students, so they can have discussions in English and do some presentations. ... Oh, so many interesting things to do, which makes me feel excited now. I really want to be that kind of English teacher.”

Jay’s future job description was very detailed and was evidenced understanding beyond a vague description lacking foundational knowledge of what L2 instruction is in classrooms. His vision was based on the reflection of his own English learning in the past and showed the eagerness to improve the English learning of his students in the future.

Dora gave her description of ideal English learner as the following:

“After graduation, I want to go abroad to further my study. Yes, I have this idea after the intervention. I always have the idea of going abroad but I hesitated a lot. I choose to further my study abroad is not just for a degree. I go abroad because I’m always curious about new things and I love new experience in life. I can imagine that I write everything in English for my academic study. I’ll get access to various academic data source where I can read English journal articles to help me writing my paper. Hmmm... I’ll have discussions on many topics with classmates in the class fluently and I can do good presentations in English. By studying abroad, I will have more perspectives. I mean, I can broaden my views. I will read a lot of books and newspapers in my life and watch various TV programs. After class, I will definitely travel around and talk with different people. I think it’ll be great fun to know about the local culture and people. Oh, I think I’ll have some local friends and we can go to caf   or pub together and talk about various topics in life. Even I come back to China, I’ll still in contact with them and we could be lifelong friends. I hope I can work abroad for one or two years to have more experience. I really want to experience the life there. You know, we learned a lot in the textbooks but never go abroad. I think as English major, I should go to America or Britain to experience the life there. Those situations encouraged me to make the decision of furthering my study abroad because I really want to have that kind of life.”

Dora was very eager to share her vision of English use in the future. She had a vivid picture of studying abroad, both in academic study and social life. She claimed that the written reflection of the Ideal L2 Self helped her to form the vision of her future life which confirmed her in her decision of studying abroad.

The two themes discussed above aligned with the change of the written versions of students' Ideal L2 Self after the intervention, which showed the positive change of the Ideal L2 Self.

***Strengthened confidence in forming vision of ideal English use.*** In this interview, four out of five participants mentioned in their responses that after the intervention, they were braver and able to envision the various situations of using English in life, which they had seldom done before. Alice's response was very typical among the participants, in her words:

"I just think I'm much braver than before. I dare to say and to imagine. You can imagine many situations of using English and actually you can really do it in your life. I don't know why I had never tried to imagine these situations before. At that time, I thought why I would use English in my future life because my English was poor and it would make me feel embarrassed if I used English. But now, things changed. I may not speak fluent English, but I'd like to use it. At least, I could make sure the process is complete. I really like the sharing of graduated students from our college. They gave me a lot of inspirations to plan my future."

In Jay's response to the second question to describe ideal use of English, after describing his ideal future job, he added some reflections. He claimed:

"It's interesting to share it with you. Yes, that's true. I kind like enjoying this kind of process now. Every time, it gives me clearer view of my future. I didn't know why I didn't do it before. Maybe at that time I was not confident enough to consider everything cause my English was not very good. I was afraid at that time. I think I just got confused and lost in my college life. How to say it, well, it's just like a kindling a fire. Is that right? Kindled fire? Forming my own visions of English learning is just like a kindled fire. Hah!"

Without any specific interview questions regarding the L2 confidence, the four participants mentioned that they were more confident after intervention to form the vision of Ideal L2 Self, which they lacked before. By doing this, they began to enjoy the process of constructing their Ideal L2 Self in the study.

In conclusion, all five participants' responses in the interview reflected improved description of their Ideal L2 Self after the intervention. Three themes on students' Ideal L2 Self

emerged by analyzing the interview data, which were extended dimensions of English use, vivid vision of English use and the importance of strengthened confidence in helping them form future visions.

### **Weakened Ought-to L2 Self**

The responses from the five participants showed that the importance of the Ought-to L2 Self decreased after the intervention. They all mentioned that before the intervention, they had cared a lot about teachers', parents' and friends' opinions on their English learning. They felt great pressure from others, especially from the parents, which made them sometimes feel confused about being an English major, whether they learned it for themselves or for their parents. If they did not achieve high grades, they may soon lose patience and begin to doubt their learning abilities. Alice reflected in the interview:

“I felt that before this intervention, I learned English for others, for example, my parents. My parents had high expectation on me. For example, they always say that you need to study hard and compare me with their friends' kids. At that time, I felt the great pressure from them. If I didn't learn English well, then I felt that I would definitely let them down. Then I felt more and more pressure and began to be confused about English learning. I didn't know how to learn English well to reach my parents' expectation.”

Alice then discussed the change of her attitude toward others' opinion after the intervention. She felt that she does not care so much about others' opinions. Though her parents sometimes still talked about her English study, she did not think their words were that important for her learning. The other four students had similar change of Ought-to L2 Self like Alice. By analyzing their responses to the question, two themes emerged from the interview data.

**Weakening Ought-to L2 Self by better vision of language learning.** Four out of five participants mentioned in the interview that the better they understood their English learning, the less pressure they felt from others on their learning, which made the English learning more interesting and helped them learn more efficiently. It was important that they had a clearer view

of how they could use English at present and in the future, including what they need to do related to the language learning by making detailed action plan and realizing their own drawbacks in the learning process. Mary stated:

“At first, I was terrified to have English class. I always wondered what other would think about you, if the teacher would think that I was stupid. But now, things changed. I don’t have such kind of feeling. It’s much better now. I found that the more I understood my own learning, the less I cared others’ opinion. In the sessions, I began to know my own problems, my learning styles and I also know I want to be a good English teacher in primary school. I began to imagine the better use of English in my life. Now, I will try to improve my English and making mistakes is absolutely normal for me since I’m still an English major at college. Yes, I just need to overcome these things.”

In Lily’s reflection, she told that her parents had high expectation on her, which made her feel a lot pressure from the family. But after constructing the clear vision of her future self, she began to realize that learning English as her major was the learning process for herself. Her parents were not in Shanghai to watch her study every day and they did not understand English. Only she herself had clear idea of her problems and progress in English learning. It was important for her to analyze her own learning process to improve English.

Four participants interviewed reflected that after realizing that they had a personal rationale for why they were studying English, they could focus more on their own learning process and their own reflections, which decreased the importance played by the role of their family, friends or teachers.

***Weakening Ought-to L2 Self by focusing on one’s learning aims.*** All five students stated the importance of having clear and concrete aims, and then concentrating on achieving the aims, which immensely relieved their anxious feeling of the pressures from others. The students began to believe firmly that they learn English for themselves. Even some of the students’ grades may not be high, they could still work hard and consistently. Jay talked a lot about his change of Ought-to L2 Self:

“My family influenced me a lot, yes, a lot! My dad’s English is excellent since he worked abroad before. He’s a table tennis coach, you know, table tennis, in Qatar several years ago. I sometimes wish that my English could be as good as my father’s. He also pays attention to my English learning. He helped me to choose English major and gave me a lot of instructions. I don’t know. I often felt frustrated because I can’t reach my father’s expectations. Sometimes, I even want to give up the English major. But now, after the sessions, I have my aims and visions. I know my English learning is different from my father’s. I suddenly have different feelings. I feel that I’m more dependent from my parents. At the first time, I want to learn for myself, and I don’t need them to tell me what I should do and what I should not do in English learning. Maybe I need before, but no now. I have my aims and I have different feelings. Aims are important for me now.”

Another student Dora mentioned that she now thinks that her own ideas of English learning are very important. Her parents actually knew nothing about English and what they talked about learning was just results, which sometimes made her feel depressed if she could not achieve high grades. But now by switching her attention from the results to the clear learning aims and process, she began to find her own pace of English learning. This gave her great relief.

In summary, the interview participants showed the decreased importance of Ought-to L2 Self by better vision of language learning and focusing more on learning aims.

### **Improved Perception of L2 Learning Experience**

All participants stated in the interview that they did not enjoy English before even if it was their major in the college. However, they started to enjoy English learning when they took the intervention sessions. Lily expressed that she did not like English before and felt it was very boring. Now she really likes it by realizing that English is more and more practical and useful in her life. Mary shared the similar feeling. She reflected that she learned English before just for finishing the homework and passing the exams. She had to learn English because it was her major. While she felt much better now and began to realize that English learning was quite interesting. Based on the interview, one theme emerged.

### **Improved perception of English learning experience by having stronger vision of**

**English use.** When the students were able to visualize the future use of English in a more vivid and detailed way, they had better perception of English learning. The students did not heavily rely on immediate learning environment and experience, such as teachers' instructions, peer group work, which sometimes made them feel anxious if they were not provided with enough learning support. Jay discussed his change of perception of L2 Learning experience in the following words:

“In the first year in this college, I was very disappointed, you know, of this major. The college is just the second-tier one and the courses are really boring. For example, in Intensive English course, we had to use the textbook with most of the articles written before 1990s. I was unsatisfied with the textbook and didn't even want to read the articles for the second time. I didn't do the homework well and did the review just for getting high grades in the final. After the sessions, I found that actually I could use and practice English in many aspects of my life, such as communication with friends all over the world, understanding cultures in different areas, knowing advance technologies by reading some popular global magazines, like National Geographic. English major is not that useless. Hah... I don't need to wait for the translations from others. I suddenly realized that learning English was not just in English classes, taught by some specific teachers, finishing the homework and memorizing things only for the grades. It's a language! There are so many websites and Apps for me to practice my listening and speaking. In addition, I could find loads of extra materials to read. Hmmm... it's just like a window into the new world. I don't need to wait for the teachers to tell me all the things. I could even attend the TED training in Shanghai to help me improve my speaking skills. Oh, this was very helpful.”

Jay realized that learning English was not just for grades and graduation from the college. Instead, it involves a lot more things than the courses provided by the college, such as communication, understanding cultures and broadening views by reading. With stronger vision of English use, the students tend to be more enjoyable in autonomous learning. They would find more flexible ways to learn English and turn the learning process to be more interesting. Dora stated in her interview:

“I felt frustrated when I learning English before. I didn't want to have look at the books. I only focused on the last few reviews lessons to get high grades in final exams. You know that kind of review lessons, nothing to learn but have scopes of the review materials and



questions in the final. I now think that one important reason for my behavior is that I couldn't accept some teachers' teaching methods and some boring textbooks. But now, by understanding my own visions and purposes of learning, I do not rely so much on the teachers and the learning materials in class. I may still find the textbooks are boring, but I begin to find some extra materials, combined with the textbook to arouse my interest. I try to find fun in my own learning by trying different ways of learning. Well, like last time, we learned a unit in Advanced English course. It's about the racial problems in America, black and white, you know. But the text was written in 1984 and it is the essay style. The writer, I think she is black elite. Well, I learned from the text. I get bored when I read the article cause it's just about how the media ignored and distorted the image of black people. I think the view is too narrow without much evidence provided. I then did some research on this topic and I found one edition of National Geographic was about this topic. I then read it. Wow, you know what, it provides a totally different perspective. It advocates the equality of races by providing scientific evidence, like genetic studies. I think it's just amazing. Oh, I also watched the movie, called... Oh, Hidden Figures. You know, I combine those things together and I had never realized that English learning was such a great fun. Hah... Yes, so interesting..."

Dora was very excited to share her experience in the interview, with details and examples.

She had great change in her perception of English learning after the intervention and began to find the meaningfulness in learning, which made her learning become more autonomic.

Similarly, Mary mentioned that after the intervention, she began to read something she was interested in besides courses in school. By doing this, she found that there were so many coincidences in her learning. Some words may appear again and again in different articles, which deepens her understanding of the words. And she began to notice the similar opinions and different opinions by broadening reading materials, which she learned to make contrast and comparison to have deeper understanding of the topic.

In summary, students attributed their improved perceptions of themselves as L2 English learners to the focus in the intervention on improving their own agency in L2 learning. The students do not rely heavily on the teachers, course design or materials any more. By forming stronger vision of English use, they improved their perception of learning experience by adopting more autonomous and flexible ways of English learning and began to enjoy the learning process.

### **Increased Intended L2 Learning Efforts**

All the participants declared in the interview that after the intervention, they put much more effort in English learning than before, which means that their Intended L2 Learning Efforts is greatly improved. Two themes emerged by analyzing the responses to explain the change of intended L2 Learning Efforts.

**Increase of learning efforts by forming clearer learning aims.** Students with clearer learning goals are more likely to put more and consistent efforts in English learning since they know the directions. When asked about the change of English learning efforts, Dora responded:

“I work much harder now than before. I think I may be interested in English before, but maybe it’s very vague at that time and I didn’t notice it. After understanding the learning better and setting the clear aims for the present and future, I began to realize that interest and I want to work hard to realize all the goals. My eagerness to learn English becomes stronger and stronger now.”

Jay shared the similar feeling in the interview by stating the effect of having clear goals on his English learning efforts:

“Previously, I felt my enthusiasm to learn English was a bit high at the beginning of each semester. Then with the time passing by, I began to lose the enthusiasm and felt tired in learning. But in this semester, I felt I had a clear goal, and I had different feelings. I felt that I worked much harder in this semester. Well, I was a hard-work student before, but not as hard as now. In the previous semesters, I did not review the learning materials or had extra reading after the class, but in this semester, I felt I kept learning and working hard in English. I didn’t feel tired in the middle of learning because of some difficulties. It’s not just for good grades, you know.”

Clear goals provided Dora and Jay with interest and enthusiasm for hard English learning. It helped them to put efforts in learning process persistently and overcome the difficulties. The other three students all mentioned that they did put more efforts in English learning after they had set clear and meaningful goals during the intervention sessions.

**Increase of learning efforts by having detailed action plans and reflection.** The action plan is part of the intervention sessions for treatment group and in the action plan, reflection is

one important task for students to consider how they finished the tasks and why they did not complete the tasks. Three participants reported the importance of action plans in helping them work harder. Lily reflected that she found action plan was very helpful for her. She learned to write reflection at the end of the plan, which provided her with a lot of meaningful feedback of English learning. In Lily words:

“I felt feedback was very important. Hmmm... It made me see my progress in English learning. I can use it to encourage myself. I feel very happy. I do think feedback is very important. I work harder now because of it. I’m wondering why I didn’t try this kind of learning before. Maybe my English will be much better now. But now, I kind like loving English learning. I really want to learn English and I’m willing to spend more time on English learning. Now I spend most of my leisure time in English learning because it’s not just textbooks. I especially love English reading. I just felt I really, really want to read. Yes, it’s so interesting.”

Dora brought her own action plan to the interview and shared it with the researcher. When she was asked about the learning efforts, she specifically explained her action plan:

“This is my action plan. Well, after the sessions, I tried to keep writing action plan cause I feel it’s helpful. It’s very helpful for me. I’m quite easy to switch my focus from learning to other things, so I need it. Here I listed all the things I need to do in details, not just a few words, but when and how. I also listed time duration for each task. And I analyze each task to know how did I finish it, whether I reach my aims or not and why. You know, I do want to learn English well. I try much harder now because I think I found a good way to help me.”

The participants believe that an action plan helps them form concrete vision of what they should do and helps them focus on the tasks they want to finish. The reflection as one section in the action plan provides them with insightful analysis of their own learning process, which gives them meaningful feedback of their learning. By doing this, they could monitor their own English learning, which encourages them to put more efforts in learning.

## CHAPTER 5: DISCUSSION

### **Summary of the Study**

This study investigated the effects of Ideal-L2-Self-based intervention on college English majors' L2 motivation. Chapter Four presented the findings for each of the research questions, so that this chapter will present themes about language learning that arose as a result of the findings and their implications. As a more internalized motivation, the students' Ideal L2 Self was greatly improved as a result of the intervention since the students generated more dimensions of English use in the future and provided more vivid vision of their Ideal L2 Self. The results in in this study strongly supported the results of the previous studies (Chan, 2014; Magid, 2014).

The Ought-to L2 Self as the more externalized motivation was weakened with the moderate effect as a result of the intervention in the survey phase of the study. Furthermore, the analysis of the interview responses reflected that all students claimed that their Ought-to L2 Self was greatly weakened since they enjoyed better vision of the language learning and learning aims that were key parts of the Ideal L2 Self, which implied that the decrease of the importance of the Ought-to L2 Self could be caused by the improvement of the Ideal L2 Self. The change of the Ought-to L2 Self in this study echoed to the findings of Mackay's study (2019) that the students who received the intervention seldom referred to their Ought-to L2 Self compared to those received no intervention.

The L2 Learning Experience was seldom discussed in the previous intervention studies, while in this study the results showed that it was significantly improved since the students had stronger vision of English use which was the key element in the Ideal L2 Self. By enhancing

students' Ideal L2 Self, the Ideal-L2-Self-based intervention may compensate the disadvantages of the existing L2 Learning Experience and improve students' perception of the learning experience by helping them switch their focus from externalized learning factors, such as teaching methods, learning materials, or course design, to internalized autonomous learning.

The Intended L2 Learning efforts was significantly increased after the intervention and the students were much more willing to put consistent efforts in English learning when they developed clearer learning aims, detailed action plans and enjoyed fun of active learning. The improvement of the Ideal L2 Self resulted in the more time and efforts devoted to English learning. The results of this study contributed additional evidence to previous studies (Chan, 2014; Magid, 2014) that students who received the Ideal-L2-Self-based intervention devoted more efforts to English learning.

### **Themes Emerging from the Study and Their Implications**

#### **Building Confidence in Students with Their Ideal L2 Self**

The first theme emerging in this study is that it is important to build students' confidence during the development of their Ideal L2 Self. Regarding the complex and dynamic nature of the motivation (Ushioda, 1996), the development of the Ideal L2 Self is not straight-forward and easily acquired. Dörnyei (2009) pointed out that not every language learner could construct his or her Ideal L2 Self easily. Thus, it is necessary for students to receive specific guides on the development of Ideal L2 Self. By analyzing students' responses in the intervention sessions and their reflections in the interview, it is found that students' confidence plays a significant role in forming the vivid and concrete vision of the Ideal L2 Self.

As the result of this Ideal-L2-Self-based intervention, students developed their Ideal L2 Self from the very vague one to the detailed one covering various dimensions in their life. At the

beginning of the intervention, many students were eager to share their future aims, dreams, hopes and expectations of English learning in the future. However, most of them were doubtful about the possibility to achieve those aims in their study and life. It was reflected in the first-time version of Ideal L2 Self assignment at the end of the second session as well. For most of the students, it was hard for them to present a very thoughtful Ideal L2 Self. They either wrote very simple Ideal L2 Self with a few sentences and focusing mainly on their English study at college or created a very similar situation to the audio recording played to them in the second session. The students' responses after the sessions showed that they were confused about the assignment of writing Ideal L2 Self, particularly visualizing their successful use of English. Many students reported that they were not confident enough to achieve their goals and expectations. Without that confidence, the students did not take the vision of Ideal L2 Self seriously and they regarded it as just an assignment in the intervention.

The situation was improved until the third session when the students were presented with English learning role models. In discussion part of the third session, the students expressed that the stories of the peer role models gave them more confidence in having the vision of ideal language use. They began to realize the meaningfulness of visualization of the Ideal L2 self, which encouraged them to improve their English in order to achieve the goals. They believed that it was possible for them to succeed in English learning because the three role models experienced similar to their experiences when they were in the second year in college.

The significance of building the confidence in students with their Ideal L2 Self was reflected in the interview as well. Alice reported in the interview that she acquired confidence after hearing the stories of the three role models graduated from the same college. She realized that those students who had similar English learning problems as she had at second year of

college could use English fluently and succeed in work and study in the future as well. Once she had confidence in forming the vision of Ideal English use, she was much more willing to practice English in various situations. Jay had similar experience as he reflected in the interview that having confidence to form his visions of English learning was like a kindled fire which gave him a clearer view of the future and provided him with consistent motive power to learn English.

After the third session, students made great revisions on their written Ideal L2 Self and were very excited to discuss it during the first one-on-one counseling. Their written Ideal L2 Self expanded to more various dimensions in their study, work and life and the descriptions were much more vivid. With the developed and concrete Ideal L2 Self, the students realized the possibilities to achieve their goals in the future and then they began to understand the meaningfulness of developing Ideal L2 Self. In the sessions, the students expressed the eagerness to know the ways that might help them in English learning in order to fulfill the gap between the existing self and the ideal self.

This study highlighted the importance of developing students' Ideal L2 Self by providing them with guided training on visualization. Students need specific guides on how to visualize their Ideal L2 Self especially in the contexts where the students know very little about mental visualization skills, such as the situation experienced by the students in China. Among the specific guides, helping students build their confidence is extremely significant. It is important to help students realize that their goals and expectations are not dreams in imagination. Those goals are possible to achieve if they could work hard and try some effective learning strategies to overcome the existing difficulties. For language teachers, providing students with peer role models who experience the similar learning process as the students will have will effectively help students build confidence in developing vivid and detailed Ideal L2 Self, and then to

improve their L2 learning motivation. It could be done in the way of face-to-face communication between the peer role models and the students or video or audio recordings prepared by the role models and then played to the students.

### **Developing Intrinsic Motivation to Learning L2**

The theme of developing intrinsic motivation to L2 learning is developed as a result of the intervention. Intrinsic motivation comes from spontaneous enjoyment felt by the learners when they are engaged in language learning activities, overcoming various challenges and presenting the capabilities in the use of new language. It makes the language learning under learners' own control rather than under the control of other people or the surrounded circumstances (Noels, 2014). It may help the learners develop more autonomous learning styles and be engaged in learning more spontaneously. While in contrast, extrinsic motivation focuses more on the demand for learning from others and from contextual situations, so that learning is done in order to reach others' expectations (Noels, 2014).

In this study, students reported shifting their focus from others' expectations to their own learning aims and process as a result of the intervention. This is the process of developing intrinsic motivation in L2 learning. Students reflected that before the intervention, they cared a lot about others' opinions on their English learning. They felt great pressure from the expectations of the parents, teachers' judgement on their learning and the competition among the classmates, which made them feel nervous and even confused in English learning. Some of them studied hard in order to make others satisfied. For their English study at college, they did not enjoy the English learning at all and criticized teachers' teaching style, learning materials and insufficiently supportive learning environments. The students' L2 motivation at this stage was mainly extrinsic, which focuses on the factors which they could not easily control in the learning



process. After the intervention, the students began to de-emphasize the influence of their parents' expectations on them by putting focus on their own learning aims, tasks, and pace. They did not care if the results could reach their parents' expectations. What they cared most was the learning process itself which they could try different strategies to improve. For the English learning experience, they realized that it was difficult for them to change the existing deficient language learning environment. However, they could work harder and tried various ways to compensate for that deficiency. Thus, as Dora reflected in the interview, she did not rely on any teachers and the learning materials in class after the intervention and began to realize that English learning was a great fun and very interesting. The shift of students' perception of Ought-to L2 and language learning experience reflected the development of intrinsic motivation as a result of the intervention. The students started to concentrate on their learning process rather than the final grades and experience the happiness and excitement of English learning by adopting more autonomous and flexible way of learning, which ultimately leads to more efforts put in language learning. This study confirmed that in certain situations, the extrinsic motivation may undergo an internalization process that will become an intrinsic process (Noel et al., 2000), which helps students have better control of their own language learning.

The theme of developing intrinsic motivation in the study provides important implications to language teachers and educators in China. In language courses, it is hard for teachers to control all aspects of learning experiences and make improvements in short periods of time, such as changes to teaching styles, learning materials and learning environment, in order to meet all learners' needs and expectations. Encouraging students to focus on their own learning process by providing them with detailed analysis of their learning aims and obstacles in the learning process could effectively develop students' internalized motivation. During the

intervention, it was found that developing students' timeline with short-term and long-term goal statements and obstacles they needed to overcome in their study and future work helped them put more focus on the development of their own control of language learning. After forming a stronger vision of the Ideal L2 Self, the students were more likely to develop aims which they believe they could reach rather than the aims others believe they could reach. By considering and sharing the individual learning obstacles, the students began to realize that language learning was a complicated process which was very different among individuals. It was important for one to understand his or her own learning style, pace and problems in order to individualize a proper way of language learning.

Furthermore, the development of intrinsic motivation greatly relieves the pressure students feel from other's opinions, especially from their parents. For English majors in college, it is hard for most of the parents to provide students with professional instructions in learning English. By consistently emphasizing the importance of learning English and high expectations without any helpful strategies, the parents may make the students feel great pressure since many students still think highly of their parents' words and feel frustrated if they cannot reach the expectations. As language teachers, helping students develop intrinsic motivation by forming better vision of language learning and clearer learning aims will effectively ease the pressure from parents.

### **Moving from Passive to Active Learning**

One important theme emerging in this study is that students experienced the change from passive learning to active learning. Internalized motivation helps students to focus more on their English learning process and begin to experience the fun of learning. Active learning further increases their efforts contributed to the learning process. After the intervention, the students

reflected in the interview that they spent much more time on English learning during and after the class.

Dora was one of the students who typically experienced the change from passive learning to active learning. Before the intervention, Dora was frustrated with English lessons and received very low grades in exams since she seldom did the homework and review of the texts. However, during the interview, she impressed me a lot when she mentioned how she learned a unit in Advanced English course, regarding the issue of races in America in the interview. She not only read the article in the textbook which she found not attractive and convincing, but read the related articles in National Geographic which she paid seven dollars to read online. In addition, she watched the movie of *Hidden Figures*. All the things she had done were not recommended by the teachers but she did those spontaneously and enjoyed the benefits of a self-motivated learning process. She did all the learning after the class. Dora's change to active learning resulted in more efforts contributed to English learning during and after class.

Furthermore, in the interview with Dora and other students, they emphasized the important role of making a detailed action plan and reflections in helping them move from passive learning to active learning. Lily believed that the action plan gave her encouragement on the specific learning tasks and Dora regarded it as important feedback. An action plan with meaningful reflections provided students with a detailed track of their learning, helped them to analyze the problems, and thus made improvement on specific activities. The detailed action plan is important to make the Ideal L2 Self operational and provides a continuing supportive guide (Dörnyei, 2009). It provides students with consistent focus on their own learning process, avoiding distraction from other unrelated tasks and relieving pressure from others. Thus, it

encourages students to put continuous efforts in their language learning by accomplishing realistic tasks and to make further improvements by the summarizing the meaningful reflections.

This theme informs the teachers that an action plan is a necessary way to operationalize the vision and achieve the Ideal L2 Self ultimately. It is not a straight-forward task for students to finish but a back-and-forth process. A meaningful action plan needs regular revisions and detailed guidance to help students understand their language learning and finally realize their Ideal L2 Self. In addition, the importance of reflections could not be ignored since it is the key element to make the action plan realistic and informative. In this study, when the students wrote an action plan for the first time in the intervention, many of them were confused about writing plans. They showed me their written activities in the action plan during the group discussion, which were very formal and rigid, such as finishing each task in an unreasonable certain amount of time. The time restriction made it difficult for them to finish those activities. When the students were guided to write meaningful reflections at the end of each activity on their action plan rather than tick the box to show that they finished the task, they began to find that the reflections were very helpful to guide them to improve their ways of learning and monitor their own English learning process. As the result of writing an action plan, the students learned English actively and devoted more efforts to English.

### **Limitations of the Study**

There are several limitations of this study. As to the internal validity, the first limitation was the threat of selection. The participants in this study were not randomly assigned to the experimental and control group, which might lead to different results because of the different levels of their English and various learning experience. So, ANCOVA analysis was adopted in this study to adjust the preexisting differences between the two groups. The second one was

experimenter effects. The intervention was conducted by the researcher alone, which might influence the participants' responses. However, the researcher had not taught the participants in the study since they were enrolled in this college and did not teach them in the semester when the intervention was conducted. In order to reduce the experimenter effects, the treatment was standardized and checked constantly to ensure the treatment fidelity.

As to the external validity, there were mainly three threats. The first one was selection of subjects. A convenience sample was used in this study, which lacked random selection of the participants from a target population. The participants were English majors in a private college located in Shanghai, so caution must be exercised before generalizing the results to all English majors in China. The second threat to external validity was pretest-posttest sensitization, which was "the pretest or posttest may interact with the intervention so that similar results are obtained only when the testing conditions are present" (McMillan & Schumacher, p. 266). The results of the intervention were based on the pre- and post-intervention questionnaires which might interact with the intervention. In order to minimize the effects, the pre- and post-questionnaires were distributed to the students one week before and one day after the intervention. The third threat to external validity was novelty effect. Since it was the first time for the students to receive instructions related to improving their motivation focusing on their possible selves, they might have been very interested in it because of the change of their learning routine, which might influence the results. So, the idea of motivation and effectiveness of the Ideal L2 Self was de-emphasized during the whole intervention, trying to reduce the novelty effect.

### **Recommendations for Future Research**

There are mainly three recommendations for future research. The first one concerns the development of learners' possible selves (the Ideal L2 Self and the Ought-to L2 Self). This

mixed-method study only lasted for four weeks with eight sessions and the data were collected right after the intervention. The results present the change of the students' motivation in a short period of time, so that it is difficult to know how long the students could retain the effects of such change to their motivation. At the end of the session eight, some students worried if they had the persistence in learning English after graduation and how often they would use English in the future. Therefore, longitudinal studies will be needed to better explore the changes of motivation since motivation could fluctuate over a long period of time. The results of such research could help to provide some effective strategies to support students in their sustained language learning motivation.

The second recommendation for future study is to further explore the changes of three components of the L2MSS and intended learning efforts with participants from the control group. In this study, it is worthwhile to note that for the Ideal L2 Self, Ought-to L2 Self and the Intended L2 Learning Efforts, the trends of the change of pre-intervention and post-intervention scores between treatment group and control group show opposite directions. After four weeks without receiving any intervention sessions, the strength of the Ideal L2 Self of the control group decreased. The Ought-to L2 Self strengthened and their Intended L2 Learning Efforts decreased. It will be worthwhile to include the participants from a control group in the interview to investigate and understand their change of motivation during the same period of time when the treatment group received the intervention. Such future research might provide more meaningful insights into the change of motivation by comparison of the participants' self-reflections from two groups.

The third recommendation for future study is for researchers to develop some standard activities students could complete as part of the regular class activities that would support their

developing a stronger Ideal L2 Self. It is noteworthy to investigate if the activities of the intervention in this study as after-class activities could be implemented easily by teachers during the class and still make a difference for students' motivation.

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## APPENDIX A: AUDIO RECORDING 1--MY IDEAL LANGUAGE SELF

Relax and observe your breathing for a few moments... Breathe deeply and slowing... Imagine yourself looking very far away. In the distance you see someone... You move closer and recognize yourself a few years from now... You are with a group of people about your age and you are speaking English to them. You are very excited about what you are saying, and everyone is listening to you with enthusiasm. Several people make comments, and you understand them perfectly, and enjoy being able to communicate with them in English about things all of you are interested in... The group goes over to a coffee shop and you all enter and sit down. When the waiter asks in English what you want, you answer and he smiles as he writes down your order. Everyone in the group wants to know your opinion about something very important to all of you. You explain your ideas very clearly and then listen to them expressing theirs. When it is time to leave the coffee shop, you ask the waiter for your bill and you pay. Your friends want to see you again at the weekend to take a trip some place you really want to visit. As you leave, you agree on a time to meet them, and say goodbye. Now you walk towards a building where you work. In your job, you use English a lot. You enjoy what you are doing, and are very successful, and you are able to communicate well in English with people from many countries. Stay with this feeling of confidence in your abilities for a moment... Now when you are ready, open your eyes and bring your attention back to this room, keeping with you the feeling of being able to communicate well in English.

## APPENDIX B: AUDIO RECORDING 2—MEET THE WISE PERSON WITHIN YOU

Imagine that you are standing in a wood... it's early morning on a beautiful summer's day... you can hear the birds in the trees and smell the fresh scent of the trees... the sunlight is reflected in the dewdrops on the grass...

While you are standing there feeling the soft ground under your feet... you're becoming aware that this is a special day... and as you look up through the trees you can see a high mountain... and the blue sky above it...

Between the trees, you see a narrow path leading up the mountain... and you're beginning to walk, now... up the mountain... at your own speed... slowly putting one foot in front of the other... while you can hear the birds... and feel the gentle wind on your skin...

You know that this mountain is just the right mountain for you... and now you are going through the rocks... getting higher... and you are safe and feel fine... you have a clear view and in the distance you can see a little cave... as you are getting closer, you can see somebody in front of the cave. It is Kra, the wise man. Melric's teacher. He's wise, and friendly and loving. Kra has noticed you, and he's smiling at you as you're getting closer. Kra offers you a place to sit down in front of him and relax. You know that Kra is a good listener... and you can ask him any question that you want... take your time to wait for the answer... if it comes... and go on asking questions as long as you want...

Pause for a few minutes

It is now time to slowly say goodbye to Kra and come back to this classroom... do this in your own time... and take the time you need until you want to open your eyes.

## APPENDIX C: FORMAT OF TIMELINE

<b>TIME</b>	<b>GOAL STATEMENTS</b>	<b>OBSTACLES</b>
End of this week		
End of this month		
End of this semester		
Third year of college		
Fourth year of college		
2022		
2023		
2024		
2030		
2035		
2040		
...		
...		
...		



## APPENDIX D: ACTION PLAN

[illegible]

## APPENDIX E: L2 MOTIVATION QUESTIONNAIRE

I would like to invite you to help me by participating in this survey of part of my doctorate study in University of the Pacific, U.S.A. The aim of this survey is to better understand the thoughts and beliefs of learners of English in China. This questionnaire is not a test so there are no “right” or “wrong” answers. I am interested in your personal opinion. The results of this survey will be used only for research purposes so please give your answers sincerely. Thank you very much for your help!

我诚邀您参加我在美国太平洋大学博士项目的问卷调查。这份调查的目的是为了更好地了解中国英语学习者的想法和理念。这份问卷并不是一份测试，所以没有“对”和“错”的答案。我感兴趣的是您的个人观点和想法。这份问卷的结果仅用于本次博士论文的研究，所以请您能够如实勾选答案。非常感谢您的帮助！

*I would like you to tell me how much you agree or disagree with the following statements by simply circling a number from 1 to 6. Please do not leave out any items.*

请在您认为合适的一个数字上画圈，表明您对该陈述的认可程度。请不要遗漏问题。

Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
很不同意	不同意	不太同意	基本同意	同意	很同意

(Example) If you strongly agree with the following statement, write this:

例如：如果您强烈同意一下说法，请在数字“6”上画圈：

I like skiing very much. 我非常喜欢滑雪。

1 2 3 4 5 **6**

1	I think that I am doing my best to learn English. 我觉得我自己正尽力学习英语。	1	2	3	4	5	6
2	I study English because close friends of mine think it is important. 我学习英语是由于我的好朋友认为英语重要。	1	2	3	4	5	6
3	I can imagine myself living abroad and having a discussion in English. 我可以想象自己在国外生活并用英语和当地人交流。	1	2	3	4	5	6
4	I consider learning English important because the people I respect think that I should do it. 我认为学习英语重要是由于我所尊敬的人认为我需要这样	1	2	3	4	5	6

	做。						
5	I would like to spend lots of time studying English. 我想花大量时间学习英语。	1	2	3	4	5	6
6	I imagine myself as someone who is able to Speak English. 我可以想象我能说英语。	1	2	3	4	5	6
7	Do you really enjoy learning English? 你真的喜欢学习英语么?	1	2	3	4	5	6
8	I am prepared to expend a lot of effort in learning English. 我准备很努力学习英语。	1	2	3	4	5	6
9	Studying English is important to me in order to gain the approval of my peers/ teachers/ family. 学习英语对我来说很重要是为了获得同学、老师和家人的认可。	1	2	3	4	5	6
10	I can imagine myself speaking English as if I were a native speaker of English. 我可以想象自己用英语交流时就像用母语一样。	1	2	3	4	5	6
11	Being successful in English is important to me so that I can please my parents. 学好英语对我很重要, 这样就能使我的父母高兴。	1	2	3	4	5	6
12	I would like to concentrate on studying English more than any other topic. 我想花大部分学习时间在英语课程上。	1	2	3	4	5	6
13	Compared to my classmates, I think I study English relatively hard. 和我的同学相比, 我认为我学习英语比较努力。	1	2	3	4	5	6
14	I can imagine myself speaking English with international friends or colleagues. 我可以想象和国外朋友或同事用英语交流。	1	2	3	4	5	6
15	I must study English to avoid making my parents feel disappointed. 我必须学习英语以免让我的父母失望。	1	2	3	4	5	6
16	Do you like the atmosphere of your English classes? 你喜欢上英语课时的氛围吗?	1	2	3	4	5	6
17	If an English course was offered in the future, I would like to take it.	1	2	3	4	5	6

	要是以后开设英语课，我会继续学习这个课程。						
18	Do you find learning English really interesting? 你觉得学英语真的有趣么？	1	2	3	4	5	6
19	Whenever I think of my future career, I imagine myself using English. 无论什么时候我想到将来的职业，我都能想象自己在使用英语。	1	2	3	4	5	6
20	Do you always look forward to English classes? 你是不是总盼望着上英语课？	1	2	3	4	5	6
21	Learning English is necessary because people surrounding me expect me to do so. 学习英语很必要因为周围的人都希望我学。	1	2	3	4	5	6
22	My parents/ family believe that I must study English to be an educated person. 我的父母觉得我要成为一个有文化的人，就必须学习英语。	1	2	3	4	5	6

### Basic Information

#### 基本信息

*Please provide the following information so that I can interpret your previous answer better.*

请如实填写一下信息，便于我更好地处理您的回答。

Grade (年级) \_\_\_\_\_

Name (姓名) \_\_\_\_\_

E-mail address (电子邮箱) \_\_\_\_\_

**Thank you for your cooperation!**

非常感谢您的合作！

## APPENDIX F: INTERVIEW PROTOCOL

**Intended L2 Learning Efforts:**

1. How do you think about your English learning before and after the intervention? What kind of changes of your English learning efforts have you noticed after the intervention?

你是怎么认为自己参加实验前和实验后的英语学习的？你意识到了在实验结束后自己英语学习的努力程度有哪些变化么？

**Ideal L2 Self:**

2. How would you use English for in the future after you graduate from the college?

当你从大学毕业后，你将来会如何使用英语？

3. Could you describe what you would ideally like to become as an English learner as detailed as possible?

你能尽可能详细地描述自己作为英语学习者，将来理想中的自己是怎么样的么？

**Ought-to L2 Self:**

4. How will others' opinion influence your English learning?

别人的观点会如何影响你的英语学习？

5. How does it change before and after the intervention?

这在实验前和实验后是怎么变化的？

**L2 Learning Experience:**

6. How do you enjoy your English learning?

你是怎么享受你的英语学习的？

7. How have your perceptions of your English learning experience changed before and after the intervention?

你对自己英语学习经历的看法在实验前和实验后发生了怎样的变化？

## APPENDIX G: INFORMED CONSENT FORM

(English/Chinese Versions)

The Effects of an Ideal-L2-Self-Based Intervention on Second Language Motivation of College  
English Majors in China

You are asked to take part in a research study of how the Ideal L2 Self intervention influence college English majors' motivation. Please read this form carefully and ask any questions you may have before agreeing to take part in the study.

My name is Yue Yang, and I am a student at the University of the Pacific, Gladys L. Benerd School of Education, Stockton, California, U.S.A. The purpose of this study is to learn how the Ideal L2 Self intervention influence on the students' motivation of learning English.

If you agree to be in this study, you will be asked to respond to items in the questionnaire before the intervention and respond to items on the same questionnaire after the intervention. The questionnaire is composed of scaled questions to get the information about your English learning motivation. During the intervention, your written works will be collected to make copies for an analysis of your thoughts about the interventions, and I will return these back to you. The time to finish the questionnaire might be 10 minutes and the intervention will last four weeks with two sessions a week. There will be no recordings or tape-recorded during the whole intervention. Once the intervention finishes, there will be a follow-up interview focusing on further exploring the English learning motivation. It will be the one-on-one interview with me for approximately 30 minutes and will be audio recorded. You might be contacted by me through email to be invited to take part in the follow-up interview. So, you will be asked to provide your

grade, name, and email address at the end of the L2 Motivation Questionnaire for me to be able to get contact with you.

There is the risk that you may find some of the questions about your L2 motivation to be sensitive for you to answer. There are the benefits that you might improve your English learning motivation and have better strategies to learn English.

The questionnaire, copied written works, and audio recording of the interview will be kept private by removing any identification of you. In any sort of report made in public, I will not include any information that will make it possible to identify you. Research materials will be kept in a locked cabinet where only the researcher will have access to the records. All the data will be destroyed in three years after the study is completed.

Taking part in this study is completely voluntary. You may skip any questions that you do not want to answer. If you decide not to take part in or skip some of the questions, it will not affect your current or future learning in your college. If you decide to take part in, you are free to withdraw at any time. If you are interested in taking part in the follow-up interview, please tick (✓) the option of “I am interested in taking part in the follow-up interview” at the end of the consent form. If you are not interested in it, you could simply ignore it and you will not be contacted once the intervention finishes.

The researcher conducting this study is Yue Yang. Please ask any questions you have now. If you have questions later, you may contact Yue Yang at [amy\\_yang29@hotmail.com](mailto:amy_yang29@hotmail.com) or at +86 15021349612.

You will be given a copy of this form to keep for your records.

**I am interested in taking part in the follow-up interview \_\_\_\_\_**

**Statement of Consent:** I have read the above information, and have received answers to any questions I asked. I consent to take part in the study.

Your Signature\_\_\_\_\_

Date\_\_\_\_\_



## 知情同意书

关于“理想二语自我实验对中国大学英语专业学生二语学习动机影响”的研究

您应邀参加一项关于理想二语自我实验对中国大学英语专业学生二语学习动机影响的研究。请您仔细阅读这份同意书并在同意参加研究前提出任何与您相关的问题。

我是杨悦，美国太平洋大学教育学院的博士研究生。我的研究目的就是探讨理想二语自我对学生英语学习动机的影响。

如果您同意参加这项研究，您在实验前和实验后分别完成二语习得的调查问卷。调查问卷主要由利氏量表测量的封闭式问题组成，以获取您英语学习动机的相关信息。在整个实验过程中，您的书面作业会被收上来复印，再发还给您。复印的目的是为了分析实验的结果。完成问卷的时间通常是 10 分钟左右，整个实验将持续一个月，进行八节课，每周两节课。在整个实验过程中，没有任何录像和录音。在实验结束后，会有一个进一步了解英语学习动机的访谈。这是一个一对一的访谈，最长持续 30 分钟左右，访谈的内容将会被录音。我可能会通过电子邮件联系您，并邀请您参加进一步的访谈。因此，在二语习得问卷的最后部分，您会被要求填上您所在的年纪、姓名和电子邮件地址以便我能联系到您。

关于实验的一个风险就是有些关于您二语动机的问题可能对您来说回答起来比较敏感。这项实验的益处可能会提高您的英语学习动机，同时提供更多英语学习的策略。

所有的问卷、复印资料和访谈录音都会被保密保存。在任何公开发表的报告中，我都不会提及任何可以确认出您的信息。研究材料都会被保存在上锁的柜子中，只有研究这可以接触到这些材料。所有的材料会在研究结束三年后被销毁。

参与这项研究完全是您自愿参加的。您可以跳过任何您不想回答的问题。如果您决定不参加实验或者决定跳过一些问题，也完全不会影响到您现在和将来在学校的学习。如果您决定参加后，您也可以随时退出。如果您有兴趣参加后续的访谈，请在这份知情通知书的最后打钩选上“我愿意参加后续访谈”的选项。如果您不感兴趣，您完全可以忽略这一选项。

做这项研究的研究者是杨悦。如果您有任何问题，请您随时提问。如果在今后有问题，可以随时联系杨悦，[邮箱为 amy\\_yang29@hotmail.com](mailto:amy_yang29@hotmail.com)，[电话号码为+86 15021349612](tel:+8615021349612)。

为了便于您保留资料，您将得到一份同意书的复印件。

我愿意参加实验后续的访谈 \_\_\_\_\_

**确认声明：**我已经阅读了以上所有信息，并且问的相关问题得到了回答。我同意参加这项研究。

签名： \_\_\_\_\_

日期： \_\_\_\_\_

## APPENDIX H: PLANS OF INTERVENTION SESSIONS

### Session One

#### Procedures:

Step 1: Show the students two pictures of elite athletes, Bolt (100 meters world winner) and Michael Philips (legendary swimmer in the world). Then pointed out the importance of using visualization in those athletes' training. It was a good way to train athletes to improve their skills. (3mins)

Step 2: The students watched a short video on visualization, mental imagery training in sports focusing gym training and competitive sports for 5 minutes. Then, students read a short article on "Visualization techniques for athletes—gain an edge" to have the idea of visualization. (10mins)

Step 3: Based on students' idea of visualization in sports, I discussed with the students if they had similar experience in their daily life in which they might use visualization or mental imagery. For example, if they would do presentation next day, would they visualize the environment, audience, or the contents? (3mins)

Step 4: Then discussed students' English learning in the past. If they had tried this kind of technique in their learning. There were also some questions for students to have discussion: (3mins)

1. Why did you choose English major in this college?
2. What kind of dreams or hopes did you have in the past related to your English learning?
3. Did you set any aims for their English learning in the past and whether they achieved those aims?

Step 5: Students discussed the three questions and shared their answers with the classmates and the researcher. It was done first in small group, then they shared the ideas with the whole class. (6mins)

Step 6: Students were asked if they had any aims, dreams, or hopes for the future in college English major learning. They were encouraged to write down what they thought on the paper to discuss in the next session. (5mins)

## **Handout Materials in Session One Visualization Techniques for Athletes**

### **Gain an Edge**

**By Elizabeth Quinn**

Many elite athletes routinely use visualization techniques as part of training and competition. There are many stories of athletes who have used these techniques to cultivate not only a competitive edge but also to create renewed mental awareness, a heightened sense of well-being, and confidence. All of these factors have been shown to contribute to an athlete's sports success.

Visualization has also been called guided imagery, mental rehearsal, mediation, and a variety of other things — no matter the term, the basic techniques, and concepts are the same. Generally speaking, visualization is the process of creating a mental image or intention of what you want to happen or feel in reality.

An athlete can use this technique to 'intend' an outcome of a race or training session, or simply to rest in a relaxed feeling of calm and well-being. By imagining a scene, complete with images of a previous best performance or a future desired outcome, the athlete is instructed to simply 'step into' that feeling. While imagining these scenarios, the athlete should try to imagine the detail and the way it feels to perform in the desired way.

These scenarios can include any of the senses. They can be visual (images and pictures), kinesthetic (how the body feels), or auditory (the roar of the crowd). Using the mind, an athlete can call up these images over and over, enhancing the skill through repetition or rehearsal, similar to physical practice.

With mental rehearsal, minds and bodies become trained to actually perform the skill imagined.

Research is finding that both physical and psychological reactions in certain situations can be improved with visualization. Such repeated imagery can build both experience and confidence in an athlete's ability to perform certain skills under pressure, or in a variety of possible situations. The most effective visualization techniques result in a very vivid sports experience in which the athlete has complete control over a successful performance and a belief in this new self.

Guided imagery, visualization, mental rehearsal or other such techniques can maximize the efficiency and effectiveness of your training. In a world where sports performance and success is measured in seconds, most athletes will use every possible training technique at hand. Visualization might be one way to gain that very slim margin.

## Session Two

### Procedures:

Step 1: The students discussed their aims, dreams, or hopes of English learning in college in pair group. The discussion was based on what they wrote after the first session. (6mins)

Step 2: Then the students were encouraged to brainstorm their future dreams, interests, hopes and expectations in English learning in their future life. It was not restricted to the college life, but extend to the period after their graduation. The students were first asked that in what domains of life would they use English in the future. Then they were encouraged to expand the domains and consider more opportunities in their life to use English. (5mins)

Step 3: The students were divided into group of four to share their ideas of using English in their future. (7mins)

Step 4: The audio recording “My Ideal Language Self” was played to the students with their eyes closed in a relaxed way. After the audio record finished, the students were asked to remain in their relaxed way until they felt comfortable to open their eyes and came back to the reality. (5mins)

Step 5: Since it was the first time for the students to have such training, they were encouraged to share their feeling and experience after the listening with the others in the classroom. (4mins)

Step 6: Finally, the students were given a piece of paper to write down their Ideal L2 Self when they went back. They were encouraged to write it as vividly as possible. They were asked to bring the paper with them to the next session. (2mins)

### Session Three

#### Procedures:

Step 1: The students brought the written work of their Ideal L2 Self to the class, some of which were detailed description and some were relatively brief. All students wrote their Ideal L2 Self in English. Light music was played in the classroom and they had pair work to discuss their Ideal L2 Self. (8mins)

Step 2: After pair discussion, some students volunteered to share their Ideal L2 self with the whole class. (5mins)

Step 3:

There were four role models presented by the PowerPoint, audios or videos to the students. One role model was Ma, Yun (Jack Ma, founder of Alibaba). His story of learning English and his success in English learning was presented to the student. Then the other three role models were students who graduated from the same college. They either finished their graduate study abroad or worked in international companies, using English in their daily life. They shared their experience related to English learning and using with the participants in either audios or videos. The key characteristics of the role models focused on the process they learn English and how they overcame the obstacles in their learning. (12mins)

Step 4: The students were given 3 minutes to have discussion on those role models and they could ask any questions they are interested in. (5mins)

Step 5: The students' written Ideal L2 Self were collected in order to make copies and they were promised to have their written work the next day. After they have their written work back, they were encouraged to add anything to the exiting Ideal L2 Self or they could even re-write it if they thought the first version was not good enough. (2mins)

### **Session Four**

#### **Procedures:**

Step1: The audio recording “meet the wise person within you” from Arnold’s book (p.169) was played to the students. In order to make sure that all the students understand the content, before playing the track, some difficult words were explained by the researcher. (5mins)

Step 2: The students were asked to share their feeling after listening to the audio track. They were asked if they could visualize the wise person within them based in the audio description. (5mins)

Step 3: The students were asked to consider the obstacles and difficulties that might prevent them from achieving their Ideal L2 Self. They could write down on their note book and then discuss with their classmates (pair discussion). Meanwhile, the researcher walked among the students to help them focus on their obstacles and difficulties and answered any questions raised by the students. (12mins)

Step 4: After the discussion, Timeline was introduced to the students and they were asked to fill the timeline after this session. The timeline is consisted of time, aims, obstacles and solutions. The students were encouraged to ask any question related to the timeline if they didn’t know how to fulfill it. (8mins)

Step 5: Make sure that all students understood the timeline and it was assigned to them as a homework. They were asked to bring it back to the next session. (2mins)

### **Session Five**

#### **Procedures:**

Step 1: The students shared their written timeline with the classmates. It was a volunteering task and 5 students shared their timelines. They highlighted their obstacles and difficulties. Some of them also raised questions on English learning when they fulfilled their timeline. (10mins)

Step 2: The students were divided into groups (5 students a group) to have further discussion on their timeline. Each student shared his or her timeline in the group discussion and they were encouraged to help each other review the obstacles and difficulties. (10mins)

Step 3: The researcher shared her own English learning experience with the students, focusing on the difficulties and obstacles she had in the learning process to help the students realize that it was normal for them to have a lot of difficulties in learning English in China. (5mins)

Step 4: The students were encouraged to share their anxiety and concerns of the difficulties in their English learning. (8mins)

Step 5: The students were asked to revise their timeline after the session. (2mins)



### Session Six

**Procedures:**

Step 1: The students' revised timeline tables were discussed in group of five at the beginning of the class. They shared their timelines with others and had discussion on the possibilities to achieve the aims in the timeline. (5mins)

Step 2: The students were asked if they would like to achieve the aims in the next few years, what could they do? Did they have any confusion of reaching the aims? They answered the questions randomly and a few of them mentioned having plans. Then the detailed action plan was introduced to them. (4 mins)

Step 3: The action plans were given the students and I explained the action plan table. The students were encouraged to ask any questions if they were not clear about the plan. Some students asked if they could use adapted action plan table with the same categories and contents because some of them preferred the table with more beautiful design. They were encouraged to do that. (6mins)

Step 4: The students were asked to write action plan for the short-coming goals during the class. They were reminded that it was better to write detailed and concrete plans with some description rather than list some goal-like plans. (10mins)

Step 5: The students were asked to share their action plan in group of five. (5mins)

Step 6: The students were asked to take the action plan with them back and revise it as assignment after the session. Notes in the action plans were emphasized and the students were informed that it was important to have reflection at the end of each line. (2mins)

### **Session Seven**

#### **Procedures:**

Step 1: Action plan for the long-term goals were introduced to the students. For example, they may consider how to achieve the goals through out the whole college life, future work and the personal life. (4mins)

Step 2: They were encouraged to write action plans for long-term goals and share it with others in group of 5. (10mins)

Step 3: Then the students were asked to concentrate back to their short-term action plan to see if they completed the plan. They discussed in group of 5. Before the discussion, they were encouraged to think if they completed the plan, what made them finish all the tasks. If they did not complete the plan, why? What difficulties did they have during the process? (10mins)

Step 4: Three students shared their problems in completing the action plan with the whole group. (7mins)

Step 5: The students were asked to bring back both their short-term and long-term action plan along with their timeline in the next session. They were encouraged to write action plan each week and make improvement.

### **Session Eight**

#### **Procedures:**

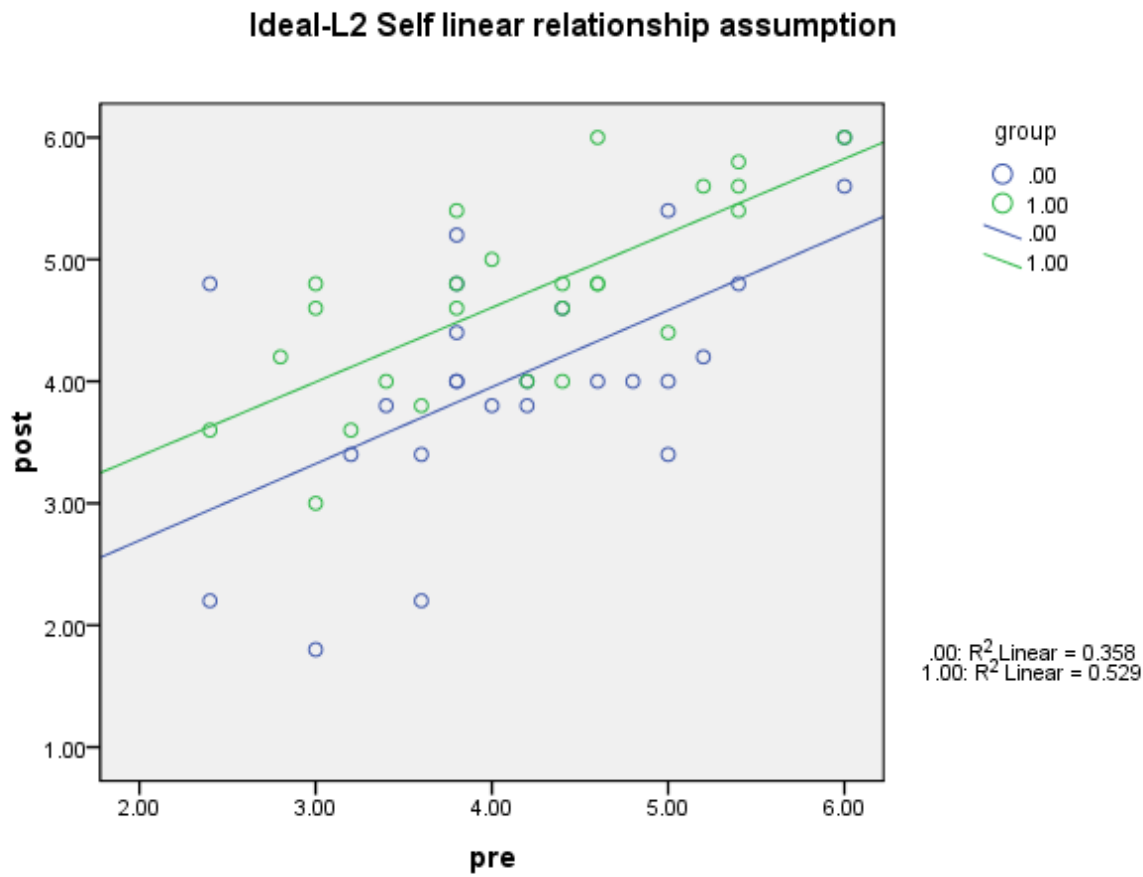
Step 1: The students reviewed the whole action plans with the timeline in group of 5. The focus was put on what revisions they made and why they made revisions. What kind of problems did they have when they carried out the action plans? During their discussion, I walked among the groups, answering their various questions and listened to their sharing. (15mins)

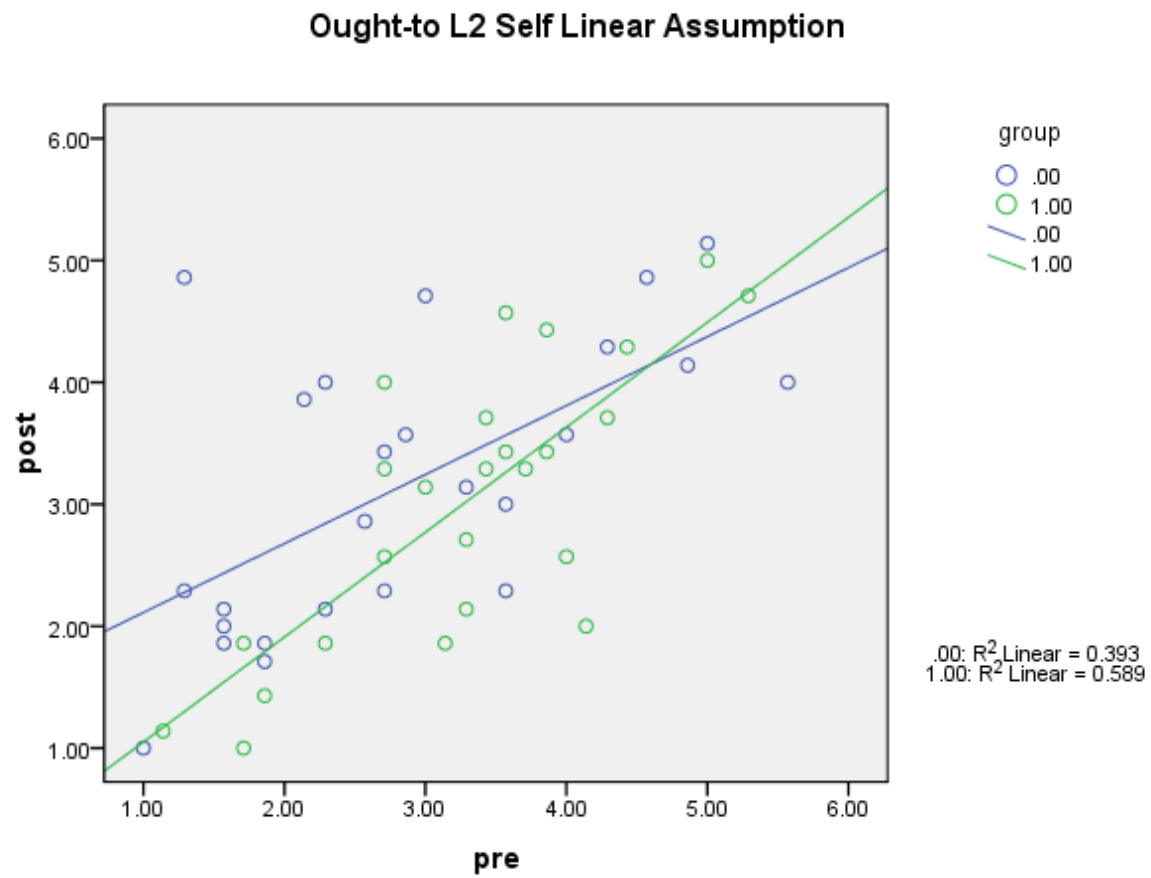
Step 2: They were encouraged to think of the fears and concerns of their Ideal L2 Self since they already had a revised Ideal L2 Self. The students then shared their ideas with the whole group. Four students did it voluntarily. (12mins)

Step 3: The students were asked if they had any confusion during the whole sessions and they could ask me whenever they like. (3mins)

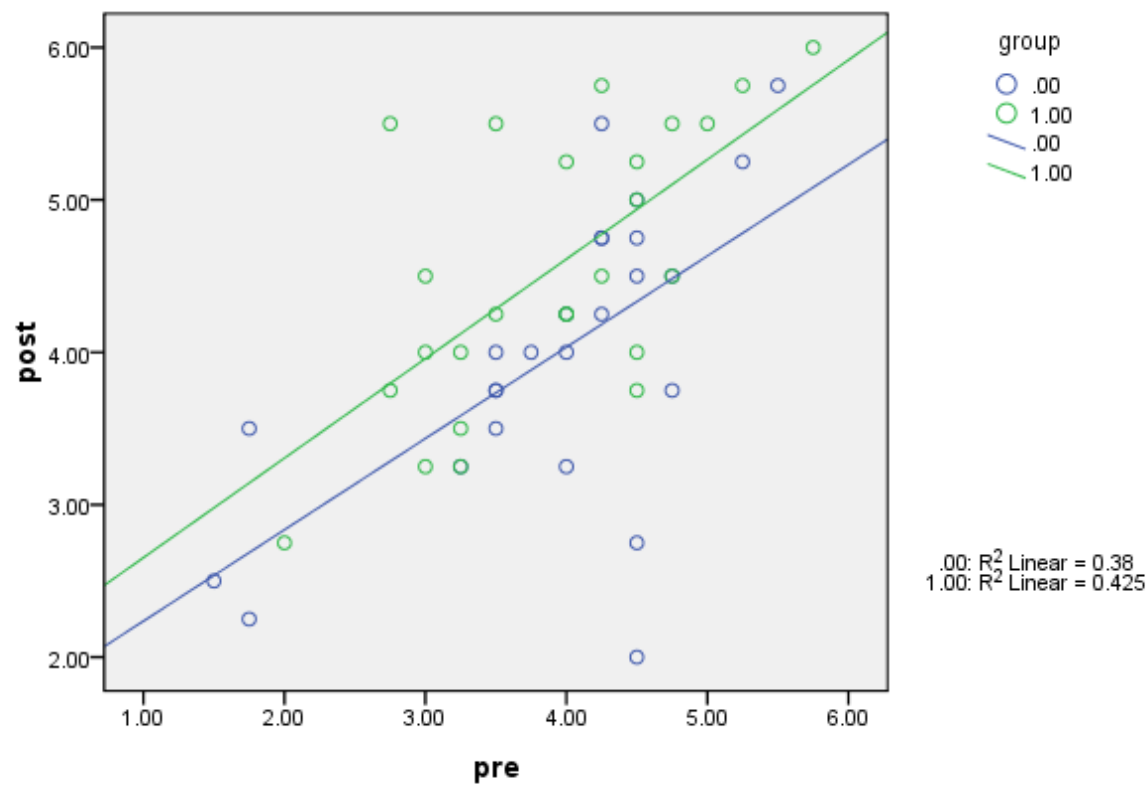
Step4: They were encouraged to make any necessary changes on their Ideal L2 Self after the session. (2mins)

APPENDIX I: OUTPUT FOR LINEAR ASSUMPTIONS

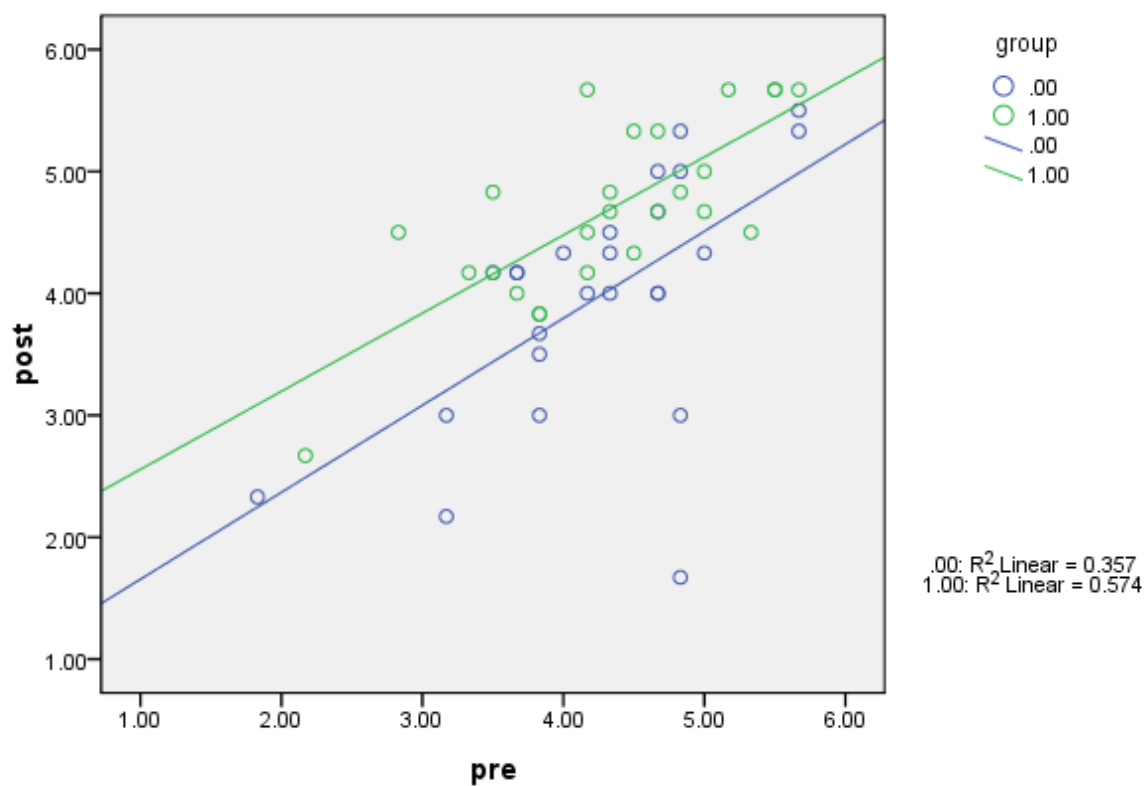




L2 Learning Experience Linear Assumption



### Intended Learning Efforts Linear Assumption



## APPENDIX J: OUTPUT FOR HOMOGENEITY

**Ideal L2 Self****Between-Subjects Factors**

	N
group .00	25
1.00	25

**Tests of Between-Subjects Effects**

Dependent Variable:post

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	21.864 <sup>a</sup>	3	7.288	14.483	.000
Intercept	7.901	1	7.901	15.702	.000
group	.323	1	.323	.642	.427
pre	16.979	1	16.979	33.741	.000
group * pre	.004	1	.004	.008	.929
Error	23.147	46	.503		
Total	1002.480	50			
Corrected Total	45.011	49			

a. R Squared = .486 (Adjusted R Squared = .452)



**Ought-to L2 Self****Between-Subjects Factors**

		N
group	.00	25
	1.00	25

**Tests of Between-Subjects Effects**

Dependent Variable:post

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	31.774 <sup>a</sup>	3	10.591	14.831	.000
Intercept	4.248	1	4.248	5.948	.019
group	2.593	1	2.593	3.631	.063
pre	31.504	1	31.504	44.113	.000
group * pre	1.347	1	1.347	1.887	.176
Error	32.851	46	.714		
Total	541.660	50			
Corrected Total	64.625	49			

a. R Squared = .492 (Adjusted R Squared = .459)

## L2 Learning Experience

### Between-Subjects Factors

		N
group	.00	25
	1.00	25

### Tests of Between-Subjects Effects

Dependent Variable:post

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	21.096 <sup>a</sup>	3	7.032	12.611	.000
Intercept	8.990	1	8.990	16.124	.000
group	.089	1	.089	.160	.691
pre	17.122	1	17.122	30.708	.000
group * pre	.032	1	.032	.057	.812
Error	25.649	46	.558		
Total	954.125	50			
Corrected Total	46.745	49			

a. R Squared = .451 (Adjusted R Squared = .416)

## Intended L2 Learning Efforts

**Between-Subjects Factors**

		N
group	.00	25
	1.00	25

**Tests of Between-Subjects Effects**

Dependent Variable:post

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	22.359 <sup>a</sup>	3	7.453	16.491	.000
Intercept	3.714	1	3.714	8.217	.006
group	.431	1	.431	.955	.334
pre	15.867	1	15.867	35.110	.000
group * pre	.046	1	.046	.102	.751
Error	20.789	46	.452		
Total	979.294	50			
Corrected Total	43.147	49			

a. R Squared = .518 (Adjusted R Squared = .487)

## APPENDIX K: ANOCOVA SYNTAX

**Syntax for Linear Assumption:**

GRAPH

/SCATTERPLOT(BIVAR)=pre WITH post BY group

/MISSING=LISTWISE

/TITLE='Ideal-L2 Self linear relationship assumption'.

**Syntax for Homogeneity:**

DATASET ACTIVATE DataSet1.

UNIANOVA post BY group WITH pre

/METHOD=SSTYPE(3)

/INTERCEPT=INCLUDE

/CRITERIA=ALPHA(0.05)

/DESIGN=group pre group\*pre.

**Syntax for ANCOVA:****Research Question 1:**

DATASET ACTIVATE DataSet1.

UNIANOVA post BY group WITH pre

/METHOD=SSTYPE(3)

/INTERCEPT=INCLUDE

/EMMEANS=TABLES(group) WITH(pre=MEAN) COMPARE ADJ(BONFERRONI)

/PRINT=ETASQ DESCRIPTIVE

```
/CRITERIA=ALPHA(.05)
```

```
/DESIGN=group pre.
```

**Research Question 2:**

```
DATASET ACTIVATE DataSet2.
```

```
UNIANOVA post BY group WITH pre
```

```
/METHOD=SSTYPE(3)
```

```
/INTERCEPT=INCLUDE
```

```
/EMMEANS=TABLES(group) WITH(pre=MEAN) COMPARE ADJ(BONFERRONI)
```

```
/PRINT=ETASQ DESCRIPTIVE
```

```
/CRITERIA=ALPHA(.05)
```

```
/DESIGN=group pre.
```

**Research Question 3:**

```
DATASET ACTIVATE DataSet3.
```

```
UNIANOVA post BY group WITH pre
```

```
/METHOD=SSTYPE(3)
```

```
/INTERCEPT=INCLUDE
```

```
/EMMEANS=TABLES(group) WITH(pre=MEAN) COMPARE ADJ(BONFERRONI)
```

```
/PRINT=ETASQ DESCRIPTIVE
```

```
/CRITERIA=ALPHA(.05)
```

```
/DESIGN=group pre.
```

**Research Question 4:**

DATASET ACTIVATE DataSet4.

UNIANOVA post BY group WITH pre

/METHOD=SSTYPE(3)

/INTERCEPT=INCLUDE

/EMMEANS=TABLES(group) WITH(pre=MEAN) COMPARE ADJ(BONFERRONI)

/PRINT=ETASQ DESCRIPTIVE

/CRITERIA=ALPHA(.05)

/DESIGN=group pre.

## APPENDIX L: ANVOCA OUTPUT

**Research Question 1 Ideal L2 Self:****Pretest scores:****Report**

pre

group	Mean	N	Std. Deviation
.00	4.1760	25	.96837
1.00	4.1360	25	.95170
Total	4.1560	50	.95044

**ANCOVA:****Between-Subjects Factors**

	N
group .00	25
1.00	25

**Descriptive Statistics**

Dependent Variable:post

group	Mean	Std. Deviation	N
.00	4.0640	1.01771	25
1.00	4.6880	.79808	25
Total	4.3760	.95843	50

### Tests of Between-Subjects Effects

Dependent Variable:post

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	21.860 <sup>a</sup>	2	10.930	22.189	.000	.486
Intercept	7.898	1	7.898	16.034	.000	.254
group	5.259	1	5.259	10.677	.002	.185
pre	16.993	1	16.993	34.497	.000	.423
Error	23.151	47	.493			
Total	1002.480	50				
Corrected Total	45.011	49				

a. R Squared = .486 (Adjusted R Squared = .464)

### Estimates

Dependent Variable:post

group	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
.00	4.052 <sup>a</sup>	.140	3.769	4.334
1.00	4.700 <sup>a</sup>	.140	4.418	4.983

a. Covariates appearing in the model are evaluated at the following values: pre = 4.1560.

### Pairwise Comparisons

Dependent Variable:post

(I) group	(J) group	Mean Difference (I-J)	Std. Error	Sig. <sup>a</sup>	95% Confidence Interval for Difference <sup>a</sup>	
					Lower Bound	Upper Bound
.00	1.00	-.649 <sup>*</sup>	.199	.002	-1.048	-.249
1.00	.00	.649 <sup>*</sup>	.199	.002	.249	1.048

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.



### Pairwise Comparisons

Dependent Variable:post

(I) group	(J) group	Mean Difference (I-J)	Std. Error	Sig. <sup>a</sup>	95% Confidence Interval for Difference <sup>a</sup>	
					Lower Bound	Upper Bound
.00	1.00	-.649 <sup>*</sup>	.199	.002	-1.048	-.249
1.00	.00	.649 <sup>*</sup>	.199	.002	.249	1.048

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

a. Adjustment for multiple comparisons: Bonferroni.

### Univariate Tests

Dependent Variable:post

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	5.259	1	5.259	10.677	.002	.185
Error	23.151	47	.493			

The F tests the effect of group. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

**Research Question 2 Ought-to L2 Self:****Pretest score:****Report**

pre

group	Mean	N	Std. Deviation
.00	2.8520	25	1.29232
1.00	3.2856	25	1.02567
Total	3.0688	50	1.17526

**ANCOVA:****Between-Subjects Factors**

	N
group .00	25
1.00	25

**Descriptive Statistics**

Dependent Variable:post

group	Mean	Std. Deviation	N
.00	3.1604	1.16568	25
1.00	3.0172	1.15031	25
Total	3.0888	1.14843	50

### Tests of Between-Subjects Effects

Dependent Variable:post

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	30.427 <sup>a</sup>	2	15.213	20.908	.000	.471
Intercept	6.133	1	6.133	8.428	.006	.152
group	2.313	1	2.313	3.179	.081	.063
pre	30.170	1	30.170	41.464	.000	.469
Error	34.199	47	.728			
Total	541.660	50				
Corrected Total	64.625	49				

a. R Squared = .471 (Adjusted R Squared = .448)

### Estimates

Dependent Variable:post

group	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
.00	3.308 <sup>a</sup>	.172	2.961	3.654
1.00	2.870 <sup>a</sup>	.172	2.524	3.216

a. Covariates appearing in the model are evaluated at the following values: pre = 3.0688.

### Pairwise Comparisons

Dependent Variable:post

(I) group	(J) group	Mean Difference (I-J)	Std. Error	Sig. <sup>a</sup>	95% Confidence Interval for Difference <sup>a</sup>	
					Lower Bound	Upper Bound
.00	1.00	.438	.246	.081	-.056	.932
1.00	.00	-.438	.246	.081	-.932	.056

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

**Univariate Tests**

Dependent Variable:post

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	2.313	1	2.313	3.179	.081	.063
Error	34.199	47	.728			

The F tests the effect of group. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

### Research Question 3 L2 Learning Experience:

#### Pretest score:

##### Report

pre

group	Mean	N	Std. Deviation
.00	3.9100	25	1.00488
1.00	3.8900	25	.91024
Total	3.9000	50	.94895

#### ANCOVA:

##### Between-Subjects Factors

	N
group .00	25
1.00	25

##### Descriptive Statistics

Dependent Variable:post

group	Mean	Std. Deviation	N
.00	3.9800	.97607	25
1.00	4.5400	.91196	25
Total	4.2600	.97672	50

### Tests of Between-Subjects Effects

Dependent Variable:post

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	21.064 <sup>a</sup>	2	10.532	19.275	.000	.451
Intercept	9.171	1	9.171	16.783	.000	.263
group	4.096	1	4.096	7.496	.009	.138
pre	17.144	1	17.144	31.376	.000	.400
Error	25.681	47	.546			
Total	954.125	50				
Corrected Total	46.745	49				

a. R Squared = .451 (Adjusted R Squared = .427)

### Estimates

Dependent Variable:post

group	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
.00	3.974 <sup>a</sup>	.148	3.676	4.271
1.00	4.546 <sup>a</sup>	.148	4.249	4.844

a. Covariates appearing in the model are evaluated at the following values: pre = 3.9000.

### Pairwise Comparisons

Dependent Variable:post

(I) group	(J) group	Mean Difference (I-J)	Std. Error	Sig. <sup>a</sup>	95% Confidence Interval for Difference <sup>a</sup>	
					Lower Bound	Upper Bound
.00	1.00	-.572 <sup>*</sup>	.209	.009	-.993	-.152
1.00	.00	.572 <sup>*</sup>	.209	.009	.152	.993

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

a. Adjustment for multiple comparisons: Bonferroni.

### Univariate Tests

Dependent Variable:post

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	4.096	1	4.096	7.496	.009	.138
Error	25.681	47	.546			

The F tests the effect of group. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

## Research Question 4 L2 Learning Efforts:

### Pretest scores:

#### Report

pre

group	Mean	N	Std. Deviation
.00	4.2400	25	.83381
1.00	4.3268	25	.86558
Total	4.2834	50	.84227

### ANCOVA:

#### Between-Subjects Factors

	N
group .00	25
1.00	25

#### Descriptive Statistics

Dependent Variable:post

group	Mean	Std. Deviation	N
.00	3.9668	.99579	25
1.00	4.6872	.73206	25
Total	4.3270	.93838	50

#### Tests of Between-Subjects Effects

Dependent Variable:post



Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	22.313 <sup>a</sup>	2	11.156	25.167	.000	.517
Intercept	3.738	1	3.738	8.433	.006	.152
group	5.459	1	5.459	12.315	.001	.208
pre	15.825	1	15.825	35.700	.000	.432
Error	20.835	47	.443			
Total	979.294	50				
Corrected Total	43.147	49				

a. R Squared = .517 (Adjusted R Squared = .497)

### Estimates

Dependent Variable:post

group	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
.00	3.996 <sup>a</sup>	.133	3.728	4.264
1.00	4.658 <sup>a</sup>	.133	4.390	4.926

a. Covariates appearing in the model are evaluated at the following values: pre = 4.2834.

### Pairwise Comparisons

Dependent Variable:post

(I) group	(J) group	Mean Difference (I-J)	Std. Error	Sig. <sup>a</sup>	95% Confidence Interval for Difference <sup>a</sup>	
					Lower Bound	Upper Bound
.00	1.00	-.662 <sup>*</sup>	.189	.001	-1.041	-.282
1.00	.00	.662 <sup>*</sup>	.189	.001	.282	1.041

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

a. Adjustment for multiple comparisons: Bonferroni.

**Univariate Tests**

Dependent Variable:post

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	5.459	1	5.459	12.315	.001	.208
Error	20.835	47	.443			

The F tests the effect of group. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.